

MISSOURI RIVER BASIN

45

BIG NEMAHIA RIVER BASIN

06814000 TURKEY CREEK NEAR SENECA, KS

LOCATION.--Lat 39°56'52", long 96°06'30", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.20, T.1 S., R.12 E., Nemaha County, Hydrologic Unit 10240007, on left bank at downstream side of county highway bridge, 2.0 mi downstream from Clear Creek, 5.0 mi upstream from Big Nemaha River, and 8.0 mi northwest of Seneca.
DRAINAGE AREA.--276 mi².

PERIOD OF RECORD.--October 1948 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,037.53 ft above NGVD of 1929. Prior to Oct. 19, 1956, water-stage recorder (occasional operation only) and nonrecording gage on former channel 400 ft south of present site at present datum. Oct. 19, 1956, to June 15, 1957, nonrecording gage at highway bridge 1.2 mi upstream at different datum. June 16, 1957, to Mar. 27, 1958, nonrecording gage at present site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,100 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Apr 6	2315	3,920	15.27		May 12	2045	*4,010	*15.46

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.32	1.9	3.8	e1.4	e1.5	4.1	3.0	9.8	17	5.5	e1.2	3.5
2	0.20	1.5	3.3	e1.4	e1.5	4.1	2.4	9.1	18	6.9	0.82	3.0
3	0.12	1.6	3.1	e1.4	e1.5	4.1	2.3	7.8	110	7.7	0.56	3.2
4	0.17	2.4	2.2	e1.4	e1.5	4.0	3.2	7.7	77	5.3	0.38	28
5	0.11	1.8	2.4	e1.4	e1.5	3.7	2.4	7.7	38	4.2	0.18	5.3
6	0.15	1.9	3.1	e1.4	e1.5	3.7	771	7.5	23	3.5	0.68	2.0
7	0.36	1.5	3.7	e1.3	e1.5	3.4	960	7.2	16	3.0	0.35	1.3
8	0.62	1.5	3.1	e1.3	e1.5	3.0	101	6.9	12	2.7	0.17	1.1
9	0.45	1.6	2.8	e1.4	e1.5	3.2	54	8.3	9.3	2.6	0.09	1.1
10	0.45	1.8	2.5	e1.5	e1.5	2.9	38	9.0	37	3.0	0.05	0.86
11	0.52	1.8	2.3	e1.5	e1.6	2.6	35	6.4	121	2.2	0.03	0.57
12	0.50	1.9	e2.2	e1.5	e30	2.8	52	892	209	2.4	0.06	0.43
13	0.45	2.1	e2.0	e1.5	87	2.3	53	1,640	184	2.5	9.8	0.32
14	0.35	2.1	e1.9	e1.4	127	2.5	34	172	59	3.5	128	0.16
15	0.45	2.1	e1.9	e1.4	43	2.6	26	81	34	2.7	37	0.17
16	0.72	2.2	e1.8	e1.4	27	2.3	22	53	26	1.6	13	0.10
17	0.33	2.4	e1.8	e1.5	18	2.3	20	41	23	1.5	6.4	0.20
18	0.34	2.8	e1.8	e1.5	12	2.5	19	33	21	3.0	4.9	0.47
19	0.50	3.2	e1.7	e1.5	9.2	2.2	19	28	18	5.7	5.1	0.18
20	0.78	3.2	e1.6	e1.6	7.7	2.0	18	24	15	3.0	4.6	0.09
21	0.95	3.3	e1.6	e1.6	7.5	2.2	25	21	14	1.7	4.3	0.05
22	0.69	2.7	e1.5	e1.5	6.3	2.4	40	19	20	1.0	3.3	0.03
23	0.95	2.2	e1.4	e1.5	5.8	5.8	20	17	13	0.63	3.0	0.02
24	0.96	2.0	e1.3	e1.5	5.4	7.2	16	15	9.7	0.44	2.5	0.02
25	1.1	3.6	e1.4	e1.5	5.0	7.4	15	14	7.6	0.32	2.3	0.02
26	1.4	2.4	e1.4	e1.5	5.0	6.6	14	11	6.3	11	3.1	0.01
27	1.1	2.0	e1.4	e1.5	4.9	5.4	13	10	5.5	84	2.6	0.02
28	1.6	2.0	e1.4	e1.5	4.8	4.4	12	9.6	4.7	e23	1.9	0.02
29	1.7	2.8	e1.4	e1.5	---	3.9	12	9.2	4.1	e8.9	5.0	0.02
30	1.6	2.7	e1.4	e1.5	---	3.8	11	8.7	4.5	e4.4	27	0.02
31	1.3	---	e1.4	e1.5	---	3.6	---	8.6	---	e2.2	9.3	---
MEAN	0.69	2.23	2.08	1.46	15.1	3.65	80.4	103	38.6	6.78	8.96	1.74
MAX	1.7	3.6	3.8	1.6	127	7.4	960	1,640	209	84	128	28
MIN	0.11	1.5	1.3	1.3	1.5	2.0	2.3	6.4	4.1	0.32	0.03	0.01
AC-FT	42	133	128	90	837	224	4,790	6,340	2,290	417	551	104

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2005, BY WATER YEAR (WY)

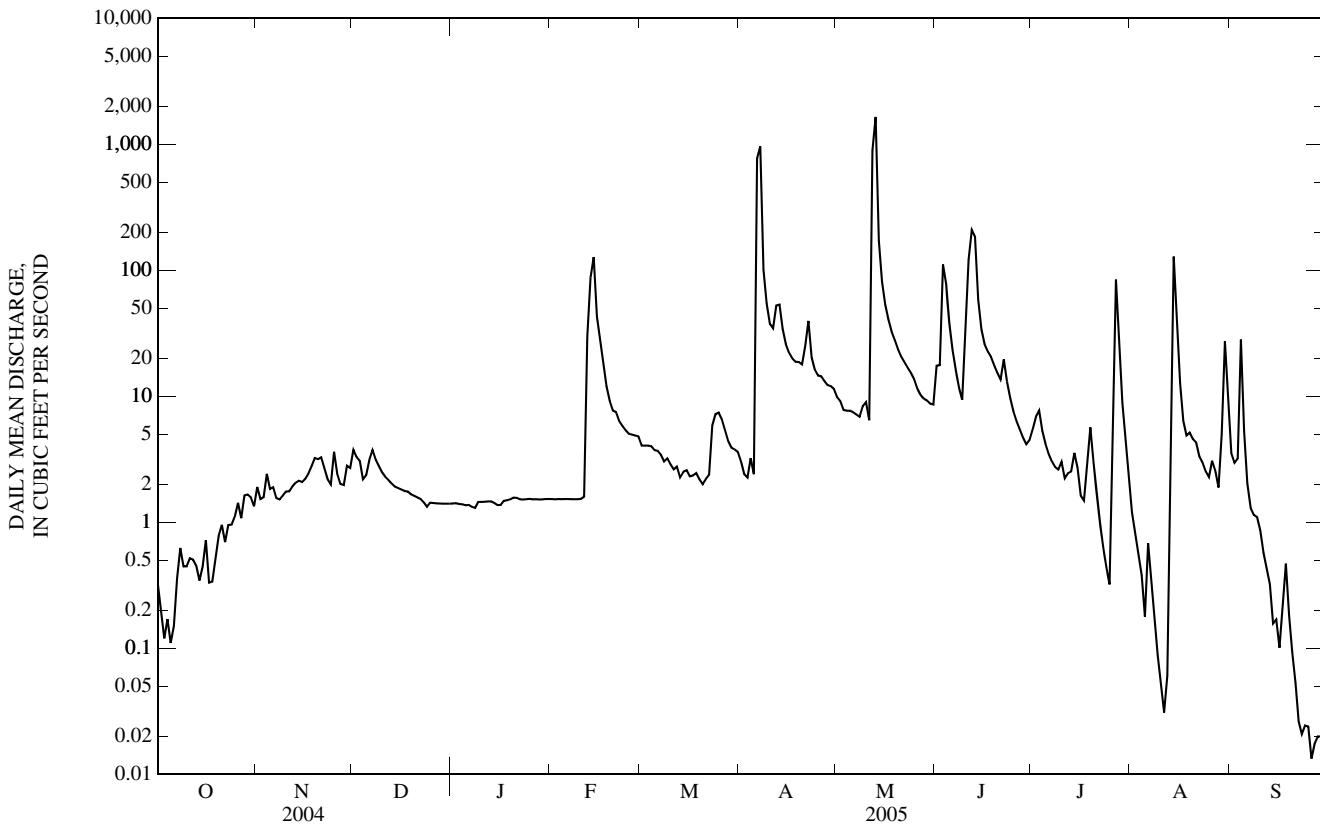
MEAN	78.8	48.4	32.0	38.4	90.5	201	170	223	232	195	76.5	126
(WY)	1,050	419	206	310	372	1,297	1,079	1,354	2,067	3,193	914	1,057
MIN	0.00	0.00	0.00	0.00	0.02	0.06	0.28	2.43	2.75	0.92	1.48	0.00
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1957)	(1957)	(1956)	(1989)	(1977)	(1989)	(1956)

BIG NEMAHA RIVER BASIN

06814000 TURKEY CREEK NEAR SENECA, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1949 - 2005	
ANNUAL MEAN	55.0		22.0		124	
HIGHEST ANNUAL MEAN					547	1993
LOWEST ANNUAL MEAN					3.24	1956
HIGHEST DAILY MEAN	3,950	Mar 5	1,640	May 13	16,700	Oct 11, 1973
LOWEST DAILY MEAN	0.11	Oct 5	0.01	Sep 26	0.00	Jul 28, 1956
ANNUAL SEVEN-DAY MINIMUM	0.17	Sep 29	0.02	Sep 23	0.00	Aug 21, 1956
MAXIMUM PEAK FLOW			4,010	May 12	21,400	Oct 11, 1973
MAXIMUM PEAK STAGE			15.46	May 12	24.77	Oct 11, 1973
INSTANTANEOUS LOW FLOW			0.00	Sep 26	0.00	Jul 28, 1956
ANNUAL RUNOFF (AC-FT)	39,900		15,940		90,160	
10 PERCENT EXCEEDS	61		27		197	
50 PERCENT EXCEEDS	6.4		2.6		20	
90 PERCENT EXCEEDS	0.70		0.41		1.9	

e Estimated



KANSAS RIVER BASIN

47

06827000 SOUTH FORK REPUBLICAN RIVER NEAR COLORADO-KANSAS STATE LINE, KS

LOCATION.--Lat 39°40'19", long 102°00'47", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.27, T.4 S., R.42 W., Cheyenne County, Hydrologic Unit 10250003, on left bank near downstream wingwall of bridge on county road, 2 mi downstream from CO-KS State line, 0.3 mi downstream from Cowpe Creek, 5 mi downstream from Beaver Creek, and 15 mi southwest of St. Francis and at mile 41.7.

DRAINAGE AREA.--1,860 mi².

PERIOD OF RECORD.--June 1945 to September 1956. June 2002 to current year. Records for June 1945 to September 1956 published in WSP 1086, 1116, 1146, 1176, 11210, 1241, 1280, 1340, 1390, 1440 are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 3,467.10 ft above NGVD of 1929. June 6, 1945, to Sept. 30, 1956, stilling well gage at same location, gage datum 3,469.98 ft above NGVD of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by Bonny Lake (about 10 mi upstream), ground-water withdrawals, and diversions from Hale Ponds (about 5 mi upstream). Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	e4.8	e5.7	e7.4	7.5	7.6	8.8	8.1	6.6	3.8	0.41	1.4
2	2.8	e4.5	e6.1	e7.4	7.6	7.8	8.8	7.9	51	3.6	0.35	1.3
3	2.8	e4.7	e6.2	e7.6	7.6	8.0	9.0	7.8	e637	3.4	0.28	1.2
4	2.6	e4.6	e6.4	e7.0	e7.5	8.0	9.0	7.7	31	3.4	0.29	1.1
5	2.6	e4.6	e6.7	e5.7	e7.5	7.9	8.6	7.5	20	3.3	0.35	1.0
6	3.2	e4.2	e6.8	e6.1	e7.5	8.0	7.9	7.7	16	3.1	0.35	1.00
7	3.2	e4.3	e6.7	e6.0	e7.5	7.7	8.0	8.8	14	2.9	0.28	1.0
8	3.0	e4.7	e6.6	e6.5	e7.4	7.5	7.8	8.0	13	2.6	0.22	0.97
9	2.9	e4.9	e6.6	e7.0	e7.4	7.6	7.5	7.8	11	2.4	0.20	0.86
10	2.8	e4.8	e6.2	e7.5	e7.4	7.2	7.8	7.5	11	2.1	0.38	0.74
11	3.0	e5.1	e6.3	e7.5	e7.4	6.8	8.6	7.1	12	1.9	0.54	0.68
12	3.5	e4.5	e6.4	e7.5	e7.3	7.0	8.5	6.8	12	1.9	0.61	0.64
13	3.5	e4.6	e6.4	e7.0	e7.3	7.0	8.1	6.8	11	1.7	0.74	0.59
14	4.0	e5.2	e6.4	e6.6	e7.3	7.0	7.9	6.5	9.8	1.6	0.82	0.59
15	4.2	e5.6	e6.5	e6.5	e7.3	7.1	7.8	6.3	9.1	1.5	0.77	0.56
16	4.3	e5.3	e6.5	e7.0	e7.4	7.2	7.6	6.1	7.9	1.3	0.69	0.50
17	e4.2	e5.3	e6.4	e7.5	7.6	7.4	7.6	5.7	7.4	1.2	0.76	0.45
18	e4.2	e6.4	e6.3	e8.0	7.5	7.3	7.7	5.4	6.8	1.4	0.70	0.45
19	e4.6	e6.4	e6.3	e8.0	7.5	7.2	7.5	5.1	6.3	1.3	0.49	0.51
20	e4.9	e6.0	e6.5	e8.0	7.8	7.3	7.5	4.7	5.9	1.1	0.44	0.47
21	e4.8	e6.2	e6.4	e7.5	7.6	8.0	7.6	4.0	5.9	0.99	0.43	0.40
22	e5.4	e6.3	e6.5	e7.5	7.6	8.5	7.1	3.6	5.3	0.86	0.80	0.35
23	e4.7	e6.3	e5.0	e7.5	7.6	8.5	7.0	3.3	4.7	0.73	1.2	0.42
24	e4.4	e6.4	e4.0	e7.3	7.5	8.3	7.0	3.2	4.5	0.61	1.6	0.41
25	e4.6	e6.1	e6.3	7.3	7.6	8.1	7.0	3.8	7.9	0.63	2.1	0.46
26	e4.7	e6.1	e6.7	7.5	7.7	8.0	6.8	3.7	8.9	1.1	1.9	0.55
27	e4.8	e6.1	e7.0	7.6	7.8	8.1	6.9	3.8	6.1	1.1	1.8	0.51
28	e4.5	e6.1	e7.1	7.6	7.7	8.2	7.2	4.7	5.0	0.98	1.8	0.43
29	e4.8	e6.0	e7.3	7.5	---	8.6	7.9	5.4	4.2	0.75	1.6	0.57
30	e4.9	e4.8	e7.3	7.4	---	8.6	8.0	5.6	3.9	0.55	1.5	0.63
31	e4.8	---	e7.3	7.5	---	9.0	---	7.5	---	0.48	1.4	---
MEAN	3.91	5.36	6.42	7.23	7.51	7.76	7.82	6.06	31.8	1.75	0.83	0.69
MAX	5.4	6.4	7.3	8.0	7.8	9.0	9.0	8.8	637	3.8	2.1	1.4
MIN	2.5	4.2	4.0	5.7	7.3	6.8	6.8	3.2	3.9	0.48	0.20	0.35
AC-FT	240	319	395	444	417	477	465	373	1,890	108	51	41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

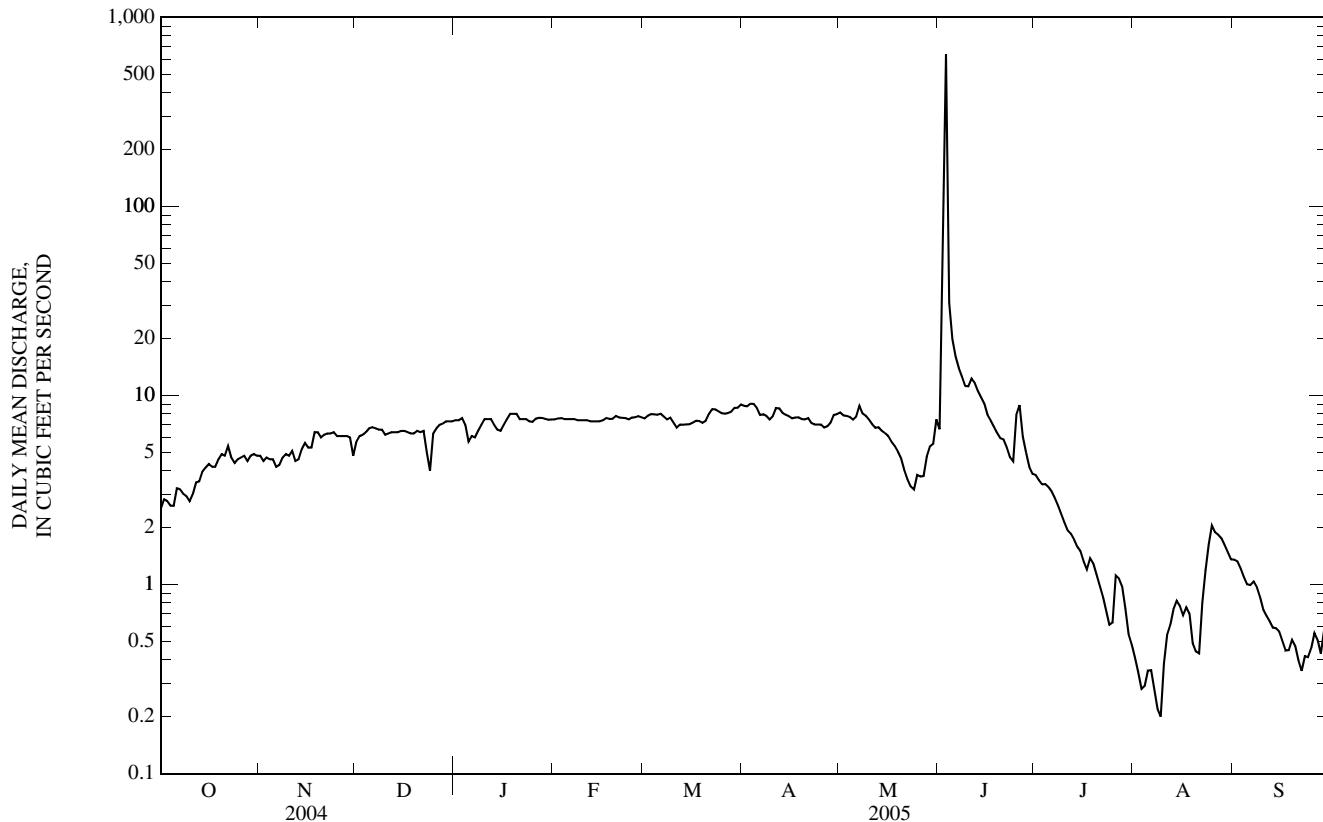
MEAN	4.40	6.51	7.66	8.02	8.49	8.92	9.10	7.61	12.1	2.63	1.33	1.75
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2004)	(2004)	(2003)	(2005)	(2003)	(2004)	(2002)
MAX	5.27	7.69	8.46	9.33	9.00	9.56	9.89	9.80	31.8	3.88	1.96	4.72
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2002)	(2005)	(2003)
MIN	3.91	5.36	6.42	7.23	7.51	7.76	7.82	6.06	3.58	1.72	0.83	0.58
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2002)	(2005)	(2003)

KANSAS RIVER BASIN

06827000 SOUTH FORK REPUBLICAN RIVER NEAR COLORADO-KANSAS STATE LINE, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 2002 - 2005
ANNUAL MEAN	5.68	7.22	6.66
HIGHEST ANNUAL MEAN			7.22
LOWEST ANNUAL MEAN			5.92
HIGHEST DAILY MEAN	13	Apr 23	Jun 3, 2005
LOWEST DAILY MEAN	0.00	Sep 14	Aug 24, 2003
ANNUAL SEVEN-DAY MINIMUM	0.10	Sep 8	Aug 24, 2003
MAXIMUM PEAK FLOW		637	1,390
MAXIMUM PEAK STAGE		0.28	10.20
INSTANTANEOUS LOW FLOW		Jun 3	Jun 3, 2005
ANNUAL RUNOFF (AC-FT)	4,120	0.00	10.20
10 PERCENT EXCEEDS	9.5	Nov 30	0.00
50 PERCENT EXCEEDS	5.8		Aug 24, 2003
90 PERCENT EXCEEDS	2.0		
			4,820
			9.5
			7.0
			0.92

e Estimated



KANSAS RIVER BASIN

49

06844900 SOUTH FORK SAPPA CREEK NEAR ACHILLES, KS

LOCATION.--Lat 39°40'37", long 100°43'18", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.29, T.4 S., R.30 W., Decatur County, Hydrologic Unit 10250010, on right bank at downstream side of county highway bridge, 5.5 mi southeast of Achilles, 14 mi southwest of Oberlin, and 18.5 mi upstream from confluence with North Fork.

DRAINAGE AREA.--446 mi², of which 68 mi² is probably noncontributing.

PERIOD OF RECORD.--July 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,722.42 ft above NGVD of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 4	0330	*219	*8.83				No other peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	7.0	0.00	0.00	0.00
4	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	44	0.00	0.00	0.00
5	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	6.2	0.00	0.00	0.00
6	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00
7	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.10	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	1.9	---	0.00	0.00	---
MEAN	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.06	1.93	0.00	0.00	0.00
MAX	0.00	0.14	0.00	0.00	0.00	0.00	0.00	1.9	44	0.04	0.01	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.5	0.00	0.00	0.00	0.00	0.00	3.8	115	0.08	0.02	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2005, BY WATER YEAR (WY)

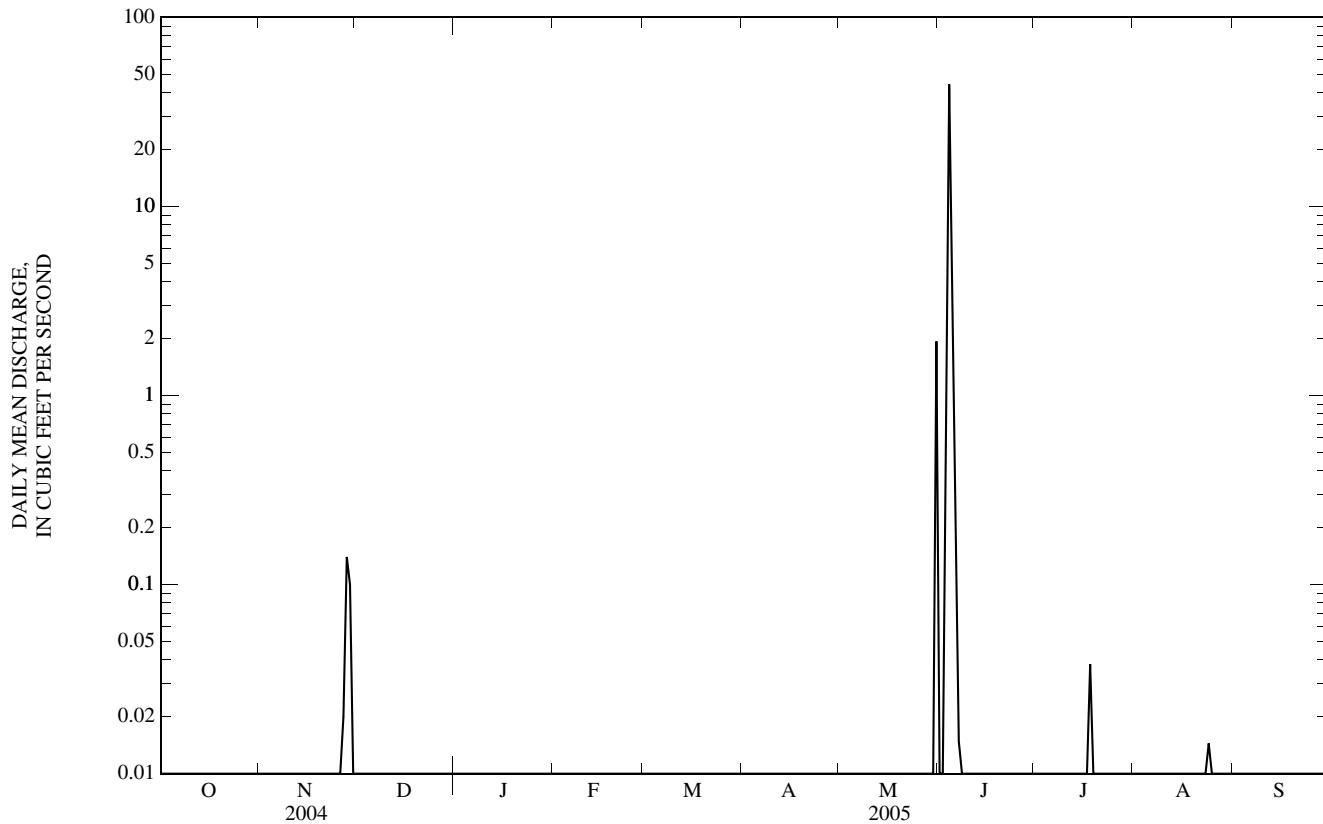
MEAN	0.88	0.19	0.18	0.29	0.88	6.81	1.36	3.73	11.2	6.44	3.33	1.54
(WY)	(1966)	(1966)	(1966)	(1993)	(1963)	(1960)	(1971)	(1981)	(1975)	(1982)	(1975)	(1965)
MAX	37.9	3.78	2.48	2.78	16.4	243	20.0	31.9	200	116	36.9	33.2
(WY)	(1960)	(1960)	(1960)	(1960)	(1961)	(1961)	(1961)	(1964)	(1980)	(1961)	(1961)	(1960)

KANSAS RIVER BASIN

06844900 SOUTH FORK SAPPA CREEK NEAR ACHILLES, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1960 - 2005
ANNUAL MEAN	0.03	0.16	3.08
HIGHEST ANNUAL MEAN			27.8
LOWEST ANNUAL MEAN			0.00
HIGHEST DAILY MEAN	3.3	Jul 4	Jun 19, 1975
LOWEST DAILY MEAN	0.00	Jan 1	Oct 1, 1959
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	Oct 1, 1959
MAXIMUM PEAK FLOW		219	5,310
MAXIMUM PEAK STAGE		8.83	11.90
INSTANTANEOUS LOW FLOW		0.00	0.00
ANNUAL RUNOFF (AC-FT)	20	119	many days
10 PERCENT EXCEEDS	0.00	0.00	2,230
50 PERCENT EXCEEDS	0.00	0.00	1.9
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated



KANSAS RIVER BASIN

51

06845000 SAPPA CREEK NEAR OBERLIN, KS

LOCATION.--Lat 39°48'47", long 100°32'02", in NW 1/4 NW 1/4 NW 1/4 sec.12, T.3 S., R.29 W., Decatur County, Hydrologic Unit 10250011, on left bank at downstream side of State Highway 83 bridge, 1.1 mi south of intersection of Highways 36 and 83, 3.0 mi downstream from confluence of North and South Forks, and at mile 133.6.

DRAINAGE AREA.--1,086 mi², of which 163 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1928 to September 1932. June 1944 to September 1972. October 1995 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1340: 1929(M), 1931, 1944(M), 1947(M), 1949, 1951(M), 1953(M).

GAGE.--Water-stage recorder. Datum of gage 2,537.76 ft above NGVD of 1929. Mar. 18, 1929, to June 30, 1932, staff gage at site 3.3 mi downstream at datum 2,522.98 ft above NGVD of 1929. June 22, 1944, to June 15, 1945, wire-weight gage 150 ft downstream of previous site at datum 2.20 ft lower. Jan. 16, 1945, to Sept. 30, 1955, water-stage recorder and concrete control 100 ft above previous wire-weight gage site at datum 2,522.50 ft above NGVD of 1929. Oct. 1, 1955, to May 21, 1958, and Jan. 5 to May 15, 1959, wire-weight gage at present site at different datum. May 20, 1959, to Sept. 30, 1972, water-stage recorder at site 3.7 mi upstream at datum 2,562.07 ft above NGVD of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft³/s, July 16, 1944 (gage height 15.28 ft, site and datum then in use, from floodmark), from rating curve extended above 4,200 ft³/s on basis of peak flow over dam; no flow at times.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Aug 28	0500	*e39	*e8.14					No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.8	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.3	0.01	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	e0.94	0.00	e17	0.10	0.00	1.8
6	e0.03	0.00	0.00	0.00	0.00	0.00	e4.2	0.00	8.4	0.00	0.00	1.2
7	e0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.2	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
10	0.00	e0.10	0.00	0.00	0.00	0.00	e0.11	0.00	0.69	0.00	0.00	0.00
11	0.00	e0.01	0.00	0.00	0.00	0.00	e0.01	0.00	0.30	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.09	0.00
18	0.00	e0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
19	0.00	e0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	e0.82	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	e0.01	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.8	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.01	e0.59	0.00	0.00	e33	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	e0.09	0.00	0.00	14	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	e0.04	0.00	0.00	1.1	0.00
31	0.00	---	0.00	0.00	---	0.00	---	1.7	---	0.00	0.09	---
MEAN	0.00	0.02	0.00	0.00	0.00	0.03	0.18	0.08	1.21	0.01	1.63	0.10
MAX	0.03	0.35	0.00	0.00	0.00	0.82	4.2	1.7	17	0.19	33	1.8
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.08	0.9	0.00	0.00	0.00	1.6	10	4.8	72	0.7	100	6.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

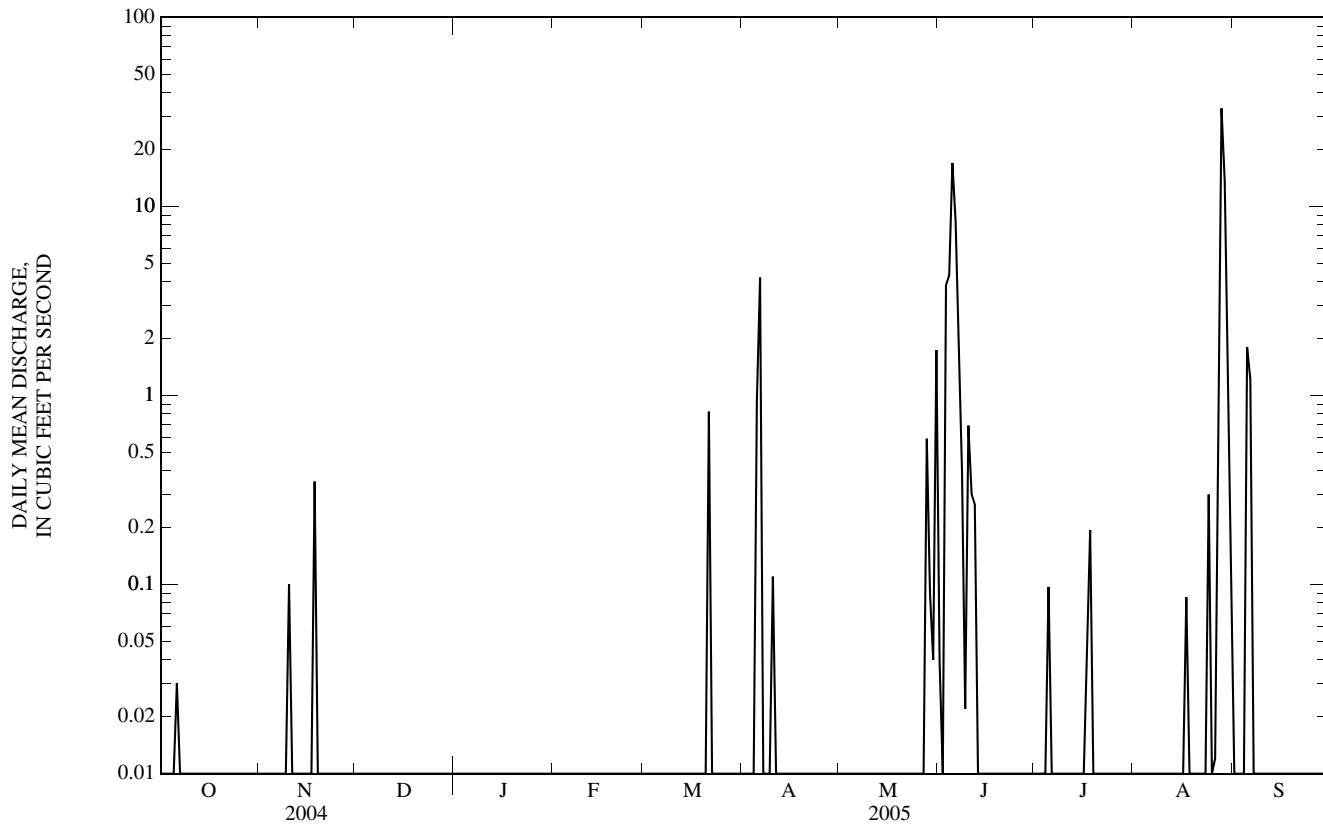
MEAN	15.0	2.64	2.04	1.58	4.71	13.6	5.17	19.1	35.3	41.5	18.2	11.3
(WY)	(1947)	(1947)	(1947)	(1931)	(1949)	(1960)	(1931)	(1957)	(1957)	(1944)	(1949)	(1951)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1954)	(1955)	(1956)	(1955)	(1956)	(1956)	(1956)	(1956)	(1956)	(2002)	(1963)	(1953)

KANSAS RIVER BASIN

06845000 SAPPA CREEK NEAR OBERLIN, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1929 - 2005
ANNUAL MEAN	0.10	0.27	13.2
HIGHEST ANNUAL MEAN			84.2
LOWEST ANNUAL MEAN			0.04
HIGHEST DAILY MEAN	20	Jul 23	5,100
LOWEST DAILY MEAN	0.00	Jan 1	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00
MAXIMUM PEAK FLOW		39	10,600
MAXIMUM PEAK STAGE		8.14	18.16
INSTANTANEOUS LOW FLOW		0.00	0.00
ANNUAL RUNOFF (AC-FT)	76	197	9,600
10 PERCENT EXCEEDS	0.00	0.01	15
50 PERCENT EXCEEDS	0.00	0.00	0.36
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated



KANSAS RIVER BASIN

53

06845110 SAPPA CREEK NEAR LYLE, KS

LOCATION.--Lat 40°00'06", long 99°59'33", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.2, T.01 S., R.24 W., Norton County, Hydrologic Unit 10250011, on right bank at upstream side of county highway bridge, 11.5 mi north and 5.5 mi west of Norton, on Kansas-Nebraska State line, and at mile 66.4.

DRAINAGE AREA.--1,488 mi².

PERIOD OF RECORD.--October 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,223.14 ft above NGVD of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals and return flow from irrigated areas. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Aug. 17	2000	*47	*7.48					No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.06	0.09	0.59	e1.5	1.4	e1.0	1.9	2.0	1.8	0.45	0.05	0.06
2	0.15	0.10	0.58	e1.2	e1.2	1.1	1.9	2.0	1.9	0.42	0.05	0.07
3	0.16	0.11	0.68	1.4	e1.2	1.1	1.8	2.0	3.2	0.33	0.05	0.07
4	0.10	0.11	0.65	e1.4	e1.3	1.1	1.7	2.0	2.8	0.35	0.06	0.07
5	0.08	0.12	0.64	e1.0	1.4	1.1	1.8	2.1	2.7	0.34	0.06	0.08
6	0.07	0.12	0.55	1.4	e1.2	1.0	3.1	2.1	3.0	0.28	0.06	0.09
7	0.06	0.11	0.74	1.4	e1.0	1.0	4.4	1.9	2.1	0.25	0.05	0.33
8	0.06	0.12	0.74	e1.4	e0.90	1.00	3.4	1.9	1.6	0.21	0.06	22
9	0.05	0.12	0.81	1.6	e1.0	e0.90	2.4	1.8	1.3	0.28	0.05	12
10	0.06	0.14	0.86	e1.4	e1.1	0.94	2.1	1.8	1.7	0.24	0.05	27
11	0.07	0.14	e0.85	e1.4	1.3	0.97	2.0	1.7	1.9	0.20	0.05	15
12	0.06	0.16	0.89	e1.5	1.2	1.0	1.9	1.7	1.7	0.17	0.06	9.9
13	0.07	0.19	e0.70	e1.6	1.3	1.0	1.8	1.7	2.0	0.16	0.05	6.7
14	0.07	0.18	e0.55	e0.95	e1.4	1.0	1.8	1.6	2.0	0.13	0.05	3.8
15	0.07	0.17	0.65	e0.95	e1.5	1.1	1.8	1.6	1.9	0.11	0.05	2.2
16	0.07	0.27	0.69	e1.0	e1.5	1.1	1.8	1.6	2.1	0.10	0.05	1.2
17	0.07	0.36	e0.65	e1.2	e1.5	1.1	1.7	1.6	1.8	0.09	25	0.69
18	0.07	0.82	0.76	e1.4	e1.6	1.2	1.8	1.6	1.7	0.10	13	0.39
19	0.06	1.1	e0.65	e1.6	1.7	1.2	1.8	1.6	1.5	0.10	2.4	0.22
20	0.07	1.2	e0.65	e1.8	1.9	1.2	1.8	1.6	1.3	0.08	2.0	0.12
21	0.07	1.3	e0.55	e1.7	1.8	2.3	1.8	1.5	1.2	0.08	0.69	0.08
22	0.07	0.90	e0.45	e1.3	e1.6	5.6	1.7	1.5	1.1	0.07	0.21	0.07
23	0.07	0.75	e0.35	e1.5	1.5	5.9	1.6	1.5	0.98	0.07	0.11	0.07
24	0.07	0.61	e0.40	e1.9	1.3	3.7	1.6	1.4	0.92	0.06	0.10	0.07
25	0.07	0.48	0.59	e1.7	1.2	2.7	1.7	1.5	1.0	0.06	0.08	0.07
26	0.07	0.42	0.57	e1.5	1.1	2.1	1.8	1.8	0.84	0.07	0.13	0.07
27	0.07	0.49	0.99	1.2	1.2	1.9	1.7	1.9	0.78	0.06	0.11	0.07
28	0.07	0.56	2.3	e1.2	1.1	1.8	1.8	2.0	0.75	0.06	0.10	0.06
29	0.08	0.57	2.2	1.3	---	1.8	2.0	1.7	0.60	0.05	0.07	0.06
30	0.08	0.65	1.4	1.3	---	1.9	2.0	1.5	0.51	0.05	0.06	0.07
31	0.09	---	e1.3	1.4	---	2.0	---	1.6	---	0.05	0.06	---
MEAN	0.08	0.42	0.81	1.39	1.34	1.70	2.01	1.74	1.62	0.16	1.45	3.42
MAX	0.16	1.3	2.3	1.9	1.9	5.9	4.4	2.1	3.2	0.45	25	27
MIN	0.05	0.09	0.35	0.95	0.90	0.90	1.6	1.4	0.51	0.05	0.05	0.06
AC-FT	4.6	25	50	85	74	105	120	107	97	10	89	204

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2005, BY WATER YEAR (WY)

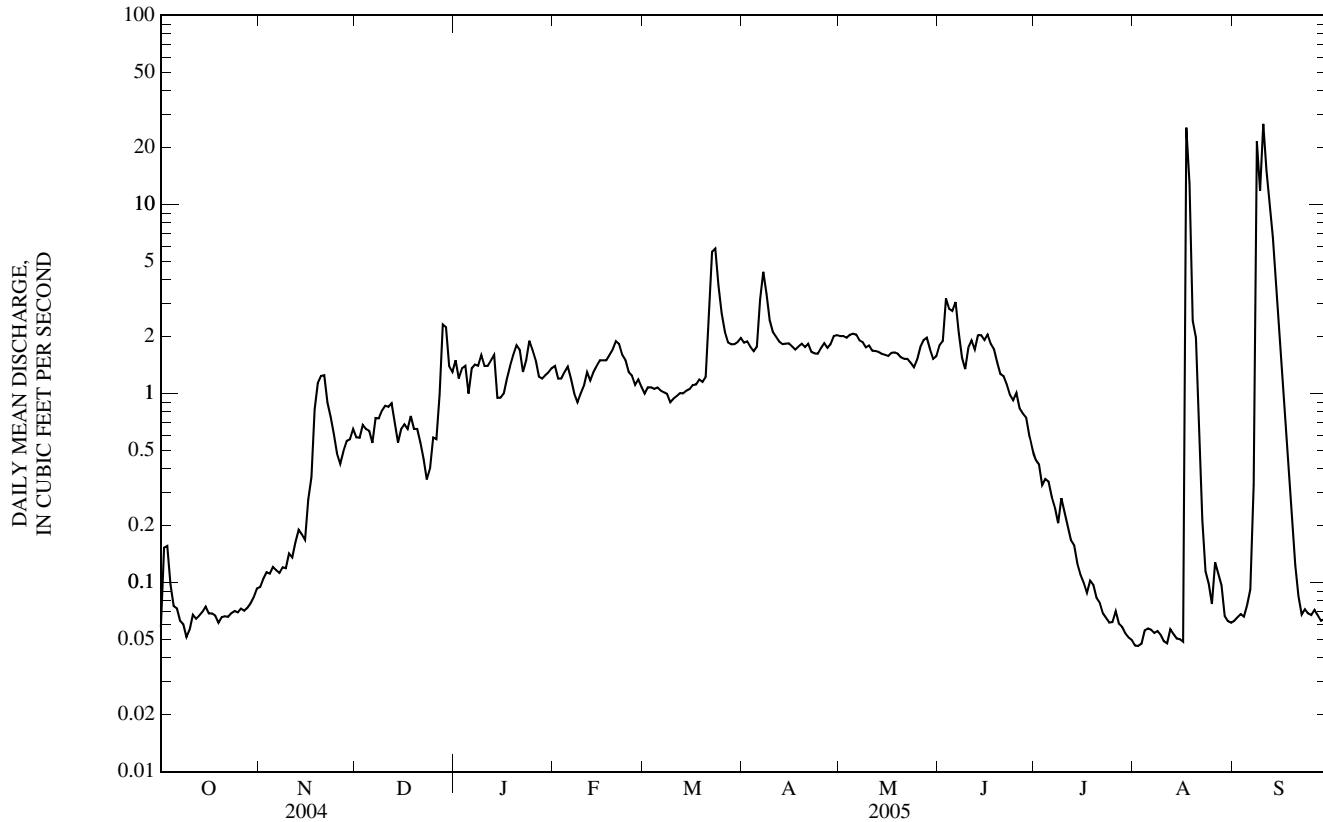
MEAN	4.58	7.09	7.49	8.11	10.0	11.2	10.8	11.4	23.4	11.2	15.3	5.81
(WY)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1996)	(1996)	(1996)
MAX	21.1	26.8	28.8	28.0	29.3	28.7	27.9	24.6	153	53.7	77.9	34.2
MIN	0.06	0.16	0.73	0.72	1.18	1.70	2.01	1.41	0.32	0.16	0.09	0.06
(WY)	(2004)	(2004)	(2001)	(2004)	(2004)	(2005)	(2005)	(2004)	(2004)	(2005)	(2003)	(2003)

KANSAS RIVER BASIN

06845110 SAPPA CREEK NEAR LYLE, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1996 - 2005
ANNUAL MEAN	1.01	1.34	10.5
HIGHEST ANNUAL MEAN			33.2
LOWEST ANNUAL MEAN			0.99
HIGHEST DAILY MEAN	21	Jul 11	642
LOWEST DAILY MEAN	0.03	Jun 14	0.02
ANNUAL SEVEN-DAY MINIMUM	0.04	Sep 8	0.03
MAXIMUM PEAK FLOW		47	786
MAXIMUM PEAK STAGE		7.48	17.46
INSTANTANEOUS LOW FLOW		0.04	0.01
ANNUAL RUNOFF (AC-FT)	735	969	7,620
10 PERCENT EXCEEDS	2.2	2.0	25
50 PERCENT EXCEEDS	0.61	1.0	5.0
90 PERCENT EXCEEDS	0.07	0.07	0.20

e Estimated



KANSAS RIVER BASIN

55

06846000 BEAVER CREEK AT LUDELL, KS

LOCATION.--Lat 39°50'53", long 100°57'40", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.30, T.2 S., R.32 W., Rawlins County, Hydrologic Unit 10250014, on left bank at downstream side of bridge on county highway, 0.5 mi south of Ludell, and 10.5 mi downstream from Little Beaver Creek, and at mile 147.8.

DRAINAGE AREA.--1,411 mi².

PERIOD OF RECORD.--March 1929 to June 1932, September 1945 to September 1953, annual maximum, 1961-88. Monthly discharge only for some periods, published in WSP 1310. October 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,753.93 ft above NGVD of 1929. March 1929 to June 1932 staff gage at railroad bridge 120 ft upstream from present site at datum 1.7 ft higher. September 1945 to October 1946 wire-weight gage on bridge 35 ft upstream from present site at same datum, and October 1946 to September 1953 water-stage recorder at same site and datum. August 1961 to September 1988 crest-stage gage at same site and datum.

REMARKS.--Records good. Natural flow affected by Atwood City Lake, ground-water withdrawals, diversions upstream for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jul 7	2000	*e0.09	*e3.78				No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2005, BY WATER YEAR (WY)

MEAN	4.65	3.11	2.65	2.57	4.75	6.72	7.58	12.2	31.3	25.9	17.2	19.3
(WY)	(1947)	(1947)	(1947)	(1947)	(1952)	(1952)	(1949)	(1949)	(1949)	(1951)	(1951)	(1951)
MAX	45.3	19.5	13.7	13.2	17.1	23.8	32.0	53.0	344	321	93.1	212
(WY)	(1999)	(1996)	(2001)	(2001)	(2001)	(2001)	(2001)	(2002)	(2002)	(2002)	(2000)	(1953)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1999)	(1996)	(2001)	(2001)	(2001)	(2001)	(2001)	(2002)	(2002)	(2002)	(2000)	(1953)

KANSAS RIVER BASIN

06846000 BEAVER CREEK AT LUDELL, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1930 - 2005
ANNUAL MEAN	0.16	0.00	11.6
HIGHEST ANNUAL MEAN			84.6
LOWEST ANNUAL MEAN			0.00
HIGHEST DAILY MEAN	36	Jul 16	2,000
LOWEST DAILY MEAN	0.00	Jan 1	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00
MAXIMUM PEAK FLOW		e0.09	3,800
MAXIMUM PEAK STAGE		3.78	11.37
INSTANTANEOUS LOW FLOW		0.00	0.00
ANNUAL RUNOFF (AC-FT)	115	0.00	8,420
10 PERCENT EXCEEDS	0.00	0.00	18
50 PERCENT EXCEEDS	0.00	0.00	1.0
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated

KANSAS RIVER BASIN

57

06846500 BEAVER CREEK AT CEDAR BLUFFS, KS

LOCATION.--Lat 39°59'06", long 100°33'35", in NW $\frac{1}{4}$ sec.10, T.1 S., R.29 W., Decatur County, Hydrologic Unit 10250014, on right bank at downstream side of bridge on U.S. Highway 83, 0.2 mi north of Cedar Bluffs, 1.0 mi south of Kansas-Nebraska State line, and at mile 107.4.

DRAINAGE AREA.--1,618 mi², of which 294 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1510: 1947, 1950-51.

GAGE.--Water-stage recorder. Datum of gage is 2,520.33 ft above NGVD of 1929. Prior to Aug. 19, 1971, at site 0.1 mi upstream at same datum. Aug. 19, 1971, to July 12, 1972, at site 0.8 mi downstream at datum 5.00 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1944 reached a stage of 18.16 ft, from floodmark.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Sep 6	0100	*100	*9.13					No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.51	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e6.2
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e28
7	e0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.03
8	e0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	0.00	---	0.00	---	0.00	---
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	1.14
MAX	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.00	0.00	28
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.0	0.00	0.00	68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2005, BY WATER YEAR (WY)

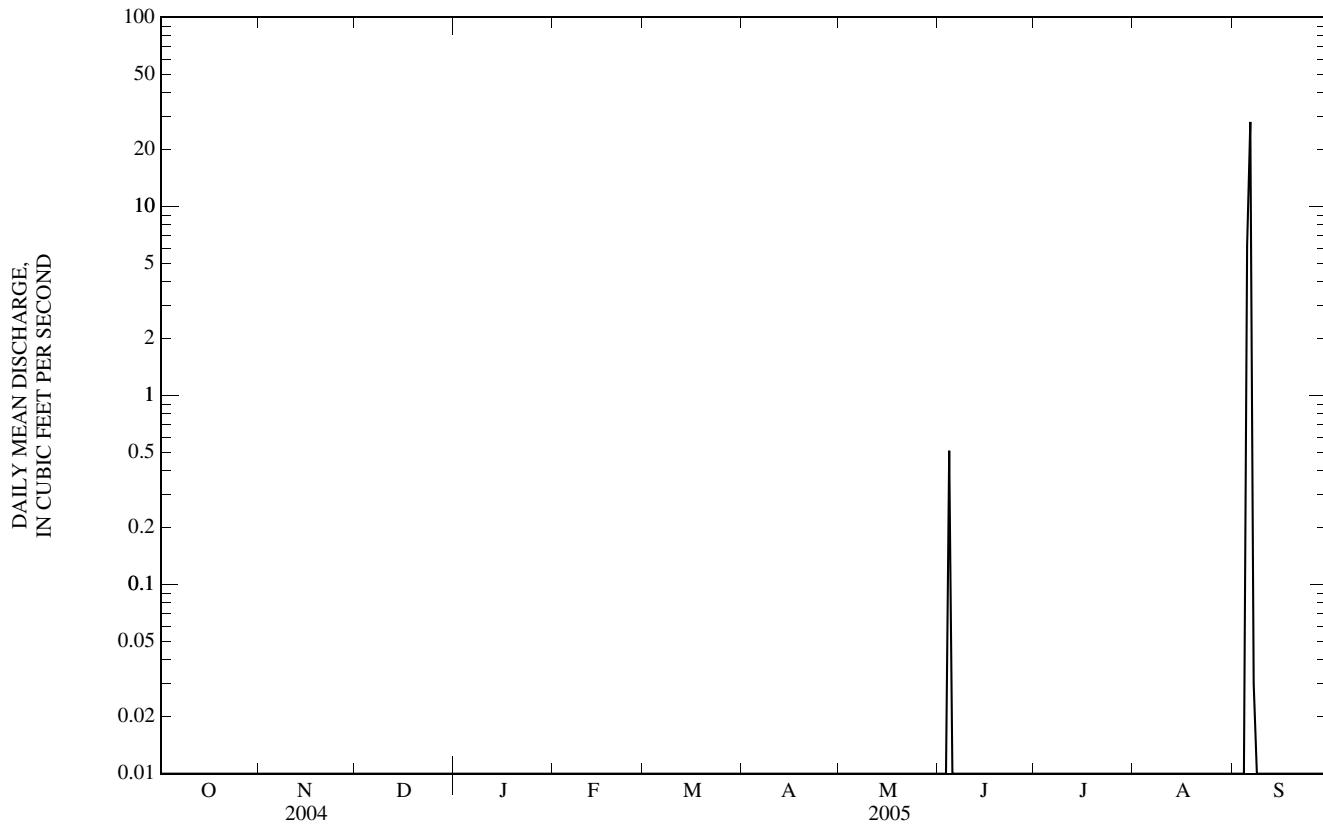
MEAN	8.08	2.67	2.29	1.99	3.51	10.7	6.59	21.4	35.4	27.1	14.2	14.7
(WY)	231	39.6	30.4	28.4	28.1	369	61.7	432	278	391	146	421
(1947)	(1966)	(1966)	(1966)	(1966)	(1960)	(1960)	(1960)	(1957)	(1960)	(1951)	(1962)	(1951)
(WY)	(1954)	(1955)	(1955)	(1955)	(1956)	(1955)	(1955)	(1955)	(1979)	(1980)	(1955)	(1953)

KANSAS RIVER BASIN

06846500 BEAVER CREEK AT CEDAR BLUFFS, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1946 - 2005
ANNUAL MEAN	0.07	0.10	12.4
HIGHEST ANNUAL MEAN			106
LOWEST ANNUAL MEAN			0.00
HIGHEST DAILY MEAN	20	Sep 27	1951
LOWEST DAILY MEAN	0.00	Jan 1	1991
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00
MAXIMUM PEAK FLOW		e100	4,560
MAXIMUM PEAK STAGE		9.13	Jun 11, 1960
INSTANTANEOUS LOW FLOW		0.00	18.71
ANNUAL RUNOFF (AC-FT)	54	69	Jun 11, 1960
10 PERCENT EXCEEDS	0.00	0.00	most years
50 PERCENT EXCEEDS	0.00	0.00	9,020
90 PERCENT EXCEEDS	0.00	0.00	20

e Estimated



KANSAS RIVER BASIN

59

06847900 PRAIRIE DOG CREEK ABOVE KEITH SEBELIUS LAKE, KS

LOCATION.--Lat 39°46'11", long 100°06'01", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.23, T.3 S., R.25 W., Norton County, Hydrologic Unit 10250015, on right bank 50 ft downstream from county highway bridge, 4.0 mi east of Clayton, and at mile 90.4.

DRAINAGE AREA.--590 mi².

PERIOD OF RECORD.--June 1962 to current year. Prior to Dec. 28, 1980, published as Prairie Dog Creek above Norton Reservoir.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,334.94 ft above NGVD of 1929. Prior to Sept. 30, 1974, at datum 2.00 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diversions for irrigation upstream from station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum known flood since at least 1944, 65,500 ft³/s May 28, 1953, at site 9.4 mi downstream, based on contracted-opening measurement of peak flow.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Sep 6	0600	*438	*8.66					No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.17	0.18	1.6	2.0	3.0	3.1	0.00	0.00	0.00
2	0.00	0.00	0.00	0.12	0.22	1.7	2.1	2.9	2.6	0.00	0.00	0.00
3	0.00	0.00	0.00	e0.09	0.29	1.6	2.2	2.8	4.5	0.02	0.00	0.00
4	0.00	0.00	0.00	e0.08	0.37	1.6	2.3	2.8	5.4	0.13	0.00	0.00
5	0.00	0.00	0.00	e0.05	0.57	1.6	3.0	2.7	3.5	0.98	0.00	1.2
6	0.00	0.00	0.00	e0.06	e0.50	1.6	16	2.6	2.9	1.5	0.00	184
7	0.00	0.00	0.00	e0.06	e0.40	1.7	7.4	2.6	2.6	0.11	0.00	6.1
8	0.00	0.00	0.00	e0.07	e0.29	1.6	4.6	2.6	2.2	0.00	0.00	1.4
9	0.00	0.00	0.00	e0.07	e0.28	1.6	4.0	2.5	1.9	0.01	0.00	0.56
10	0.00	0.00	0.02	e0.06	e0.30	1.6	3.7	2.5	2.5	0.02	0.00	0.45
11	0.00	0.00	0.06	e0.06	0.34	1.5	3.6	2.4	2.6	0.00	0.00	0.30
12	0.00	0.00	0.09	e0.06	0.48	1.6	3.4	2.4	2.2	0.00	0.00	0.26
13	0.00	0.00	0.03	e0.05	1.2	1.6	3.2	2.3	2.5	0.00	0.00	0.23
14	0.00	0.00	0.00	e0.03	1.6	1.6	3.1	2.3	2.6	0.00	0.00	0.25
15	0.00	0.00	0.06	e0.03	e1.4	1.5	3.1	2.2	2.2	0.00	0.00	0.30
16	0.00	0.00	0.12	e0.04	1.3	1.6	3.0	2.1	2.1	0.00	0.00	0.28
17	0.00	0.00	0.09	e0.05	1.1	1.6	3.0	2.2	1.9	0.00	0.00	0.26
18	0.00	0.00	0.10	e0.05	e1.1	1.7	3.0	2.1	1.9	0.00	0.00	0.27
19	0.00	0.00	0.06	e0.07	1.6	1.6	3.0	2.0	1.7	0.00	0.00	0.29
20	0.00	0.00	0.14	e0.10	1.7	1.7	3.0	1.8	1.5	0.00	0.00	0.26
21	0.00	0.00	0.08	e0.21	1.7	3.4	3.0	1.7	1.4	0.00	0.05	0.25
22	0.00	0.00	0.04	e0.06	1.5	5.1	2.9	1.5	1.3	0.00	2.7	0.21
23	0.00	0.00	0.01	e0.10	1.4	3.7	2.7	1.4	0.99	0.00	10	0.23
24	0.00	0.00	0.00	e0.15	1.4	3.0	2.7	5.1	0.85	0.00	7.4	0.24
25	0.00	0.00	0.00	0.20	1.4	2.7	3.0	4.2	1.1	0.00	2.6	0.21
26	0.00	0.00	0.00	0.12	1.5	2.5	3.0	2.0	0.59	0.00	1.8	0.23
27	0.00	0.00	0.03	0.09	1.5	2.3	2.9	1.7	0.47	0.00	0.85	0.24
28	0.00	0.00	0.13	0.08	1.5	2.3	3.2	1.7	0.25	0.00	1.4	0.20
29	0.00	0.00	0.15	0.11	---	2.3	3.3	2.0	0.10	0.00	1.0	0.18
30	0.00	0.00	0.27	0.15	---	2.4	3.2	2.3	0.00	0.00	0.28	0.23
31	0.00	---	0.18	0.17	---	2.2	---	2.8	---	0.00	0.04	---
MEAN	0.00	0.00	0.05	0.09	0.97	2.07	3.62	2.43	1.98	0.09	0.91	6.62
MAX	0.00	0.00	0.27	0.21	1.7	5.1	16	5.1	5.4	1.5	10	184
MIN	0.00	0.00	0.00	0.03	0.18	1.5	2.0	1.4	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	3.3	5.6	54	127	215	149	118	5.5	56	394

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2005, BY WATER YEAR (WY)

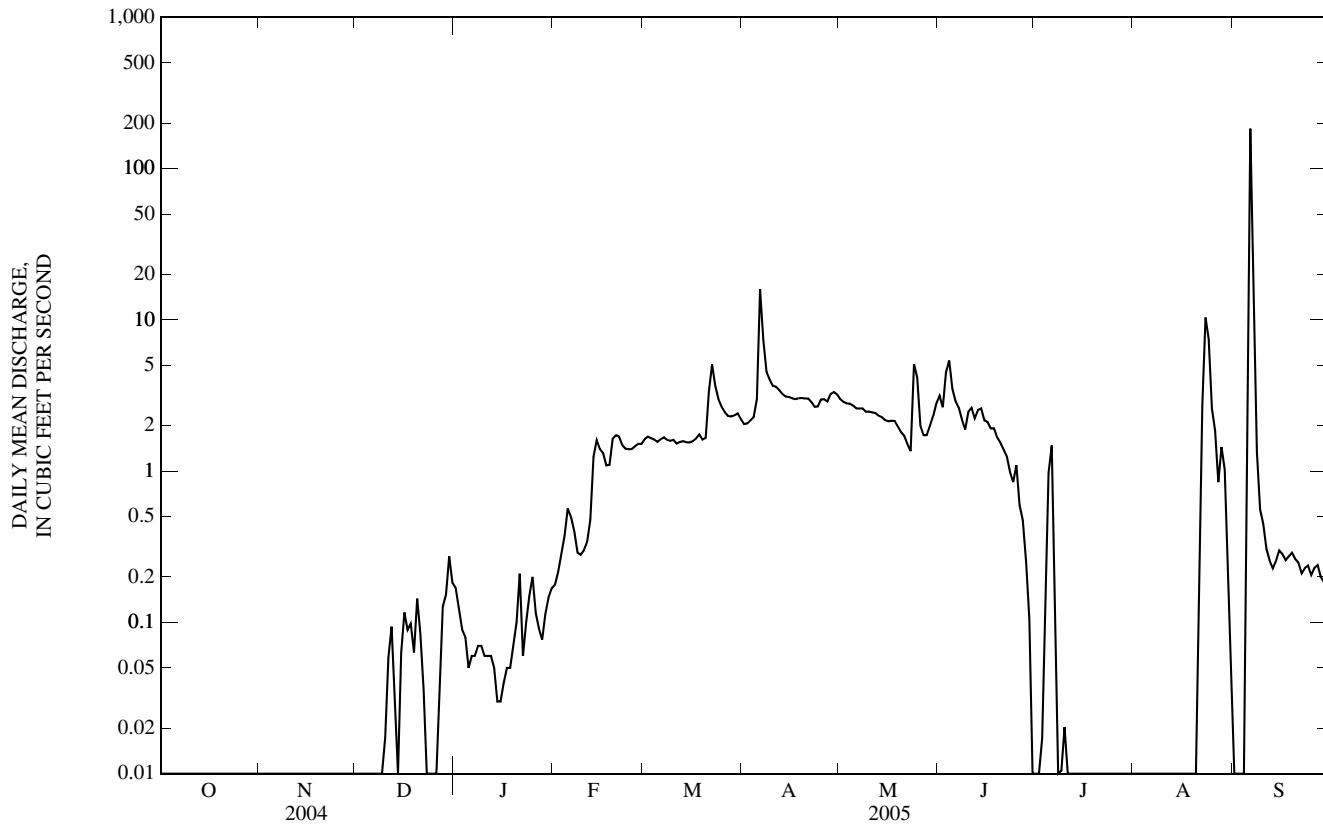
MEAN	4.21	2.21	2.41	2.64	4.97	8.47	5.91	9.02	24.5	14.6	10.2	10.7
(WY)	(1966)	(1966)	(1997)	(1997)	(1966)	(1993)	(1971)	(1977)	(1996)	(1965)	(1992)	(1965)
MAX	106	14.8	12.2	10.4	19.8	129	31.8	33.0	280	81.0	83.0	163
(WY)	(1965)	(1965)	(1981)	(1981)	(1981)	(1982)	(1982)	(1992)	(2004)	(1991)	(1980)	(1964)
MIN	0.00	0.00	0.00	0.00	0.00	0.06	0.08	0.69	0.01	0.00	0.00	0.00
(WY)	(1965)	(1965)	(1981)	(1981)	(1982)	(1982)	(1992)	(1992)	(2004)	(1991)	(1980)	(1964)

KANSAS RIVER BASIN

06847900 PRAIRIE DOG CREEK ABOVE KEITH SEBELIUS LAKE, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1963 - 2005
ANNUAL MEAN	0.54	1.56	8.32
HIGHEST ANNUAL MEAN			42.1
LOWEST ANNUAL MEAN			0.27
HIGHEST DAILY MEAN	3.4	Mar 1	1965
LOWEST DAILY MEAN	0.00	Jan 7	1981
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 7	
MAXIMUM PEAK FLOW		184	3,150
MAXIMUM PEAK STAGE		Sep 6	Jun 24, 1996
INSTANTANEOUS LOW FLOW		438	0.00
ANNUAL RUNOFF (AC-FT)	394	Sep 6	Jun 26, 1963
10 PERCENT EXCEEDS	2.1	8.66	0.00
50 PERCENT EXCEEDS	0.00	Sep 6	14.81
90 PERCENT EXCEEDS	0.00	0.00	Sep 6, 1972
		Oct 1	many years
			0.00
			6,030
			10
			2.0
			0.00

e Estimated



06847950 KEITH SEBELIUS LAKE NEAR NORTON, KS

LOCATION.--Lat 39°48'29", long 99°56'03", in SW $\frac{1}{4}$ sec.8, T.3 S., R.23 W., Norton County, Hydrologic Unit 10250015, in control tower near left end of Norton Dam on Prairie Dog Creek, 3.0 mi southwest of Norton, and at mile 74.9.

DRAINAGE AREA.--683 mi².

PERIOD OF RECORD.--October 1964 to current year. Prior to Dec. 28, 1980, published as "Norton Reservoir near Norton."

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by Bureau of Reclamation).

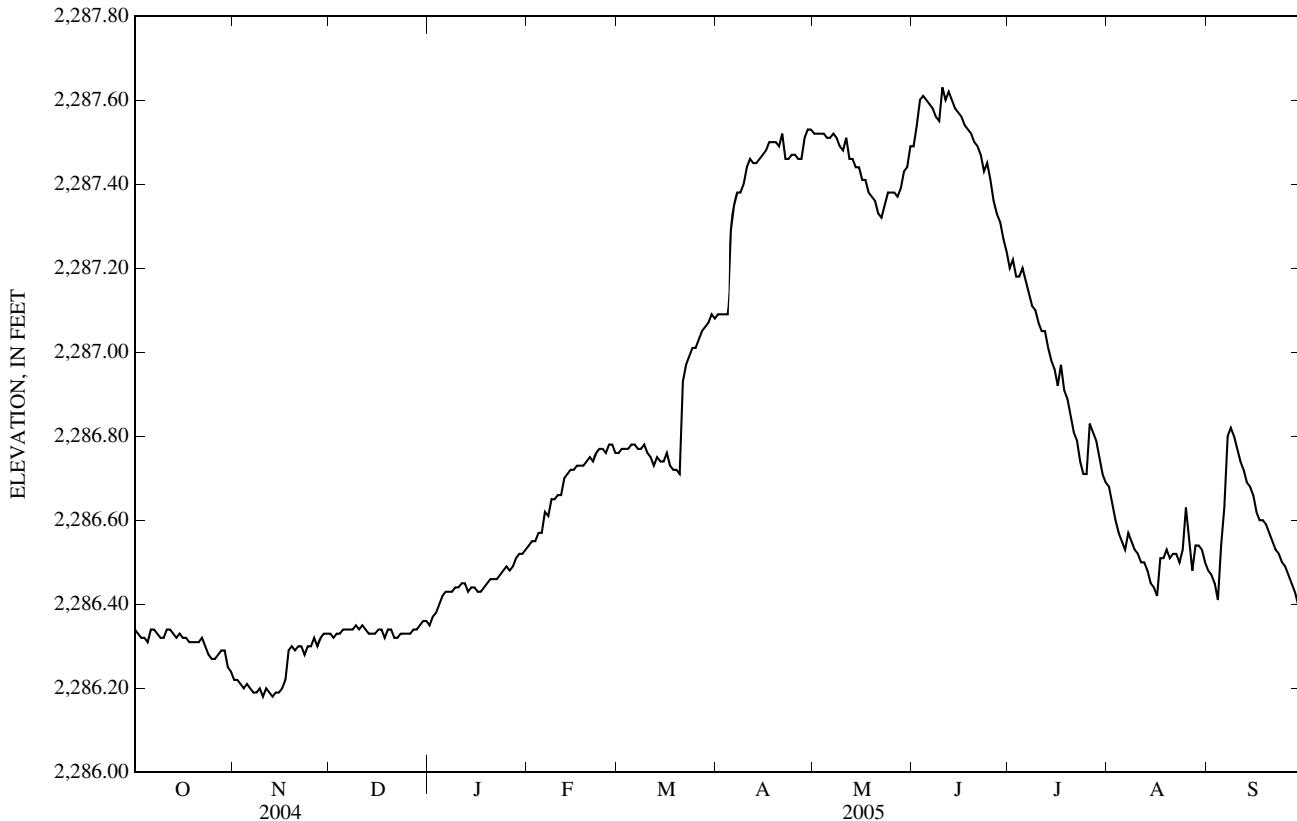
REMARKS.--Records good. Reservoir is formed by compacted earthfill dam. Storage began Jan. 28, 1964. Total capacity, 192,027 acre-ft, consisting of the following: Dead pool, 1,636 acre-ft, below elevation 2,275.0 ft; inactive pool, 2,357 acre-ft, between elevations 2,275.0 ft and 2,280.4 ft; conservation pool, 30,520 acre-ft, between elevations 2,280.4 ft and 2,304.3 ft; flood-control pool, 99,230 acre-ft, between elevations 2,304.3 ft and 2,331.4 ft; and surcharge pool, 58,290 acre-ft, between elevations 2,331.4 ft and 2,341.0 ft. Reservoir is used for flood control and irrigation in Almena Unit, Missouri River Basin project. Figures given herein represent total contents based on capacity table dated September 2000. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 2,306.58 ft, Feb. 25, 1997, contents, 41,160 acre-ft; minimum elevation since conservation pool was first filled, 2,275.82 ft, Nov. 27, 28, 1981, Jan. 24, 30, 31, 1982 contents, 3,050 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 2,287.69 ft, June 13, contents, 9,380 acre-ft; minimum elevation 2,286.15 ft, Nov. 10, contents, 8,060 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on field survey of Bureau of Reclamation in 2000)
(Effective date October 1, 2001)

Elevation 2,286	Contents 7,940	Elevation 2,288	Contents 9,660	Elevation 2,290	Contents 11,640
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KANSAS RIVER BASIN

06847950 KEITH SEBELIUS LAKE NEAR NORTON, KS—Continued

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,286.34	2,286.22	2,286.33	2,286.35	2,286.54	2,286.76	2,287.09	2,287.52	2,287.49	2,287.20	2,286.68	2,286.48
2	2,286.33	2,286.22	2,286.32	2,286.37	2,286.55	2,286.77	2,287.09	2,287.52	2,287.54	2,287.22	2,286.64	2,286.47
3	2,286.32	2,286.21	2,286.33	2,286.38	2,286.55	2,286.77	2,287.09	2,287.52	2,287.60	2,287.18	2,286.60	2,286.45
4	2,286.32	2,286.20	2,286.33	2,286.40	2,286.57	2,286.77	2,287.09	2,287.52	2,287.61	2,287.18	2,286.57	2,286.41
5	2,286.31	2,286.21	2,286.34	2,286.42	2,286.57	2,286.78	2,287.29	2,287.51	2,287.60	2,287.20	2,286.55	2,286.54
6	2,286.34	2,286.20	2,286.34	2,286.43	2,286.62	2,286.78	2,287.35	2,287.51	2,287.59	2,287.17	2,286.53	2,286.63
7	2,286.34	2,286.19	2,286.34	2,286.43	2,286.61	2,286.77	2,287.38	2,287.52	2,287.58	2,287.14	2,286.57	2,286.80
8	2,286.33	2,286.19	2,286.34	2,286.43	2,286.65	2,286.77	2,287.38	2,287.51	2,287.56	2,287.11	2,286.55	2,286.82
9	2,286.32	2,286.20	2,286.35	2,286.44	2,286.65	2,286.78	2,287.40	2,287.49	2,287.55	2,287.10	2,286.53	2,286.80
10	2,286.32	2,286.18	2,286.34	2,286.44	2,286.66	2,286.76	2,287.44	2,287.48	2,287.63	2,287.07	2,286.52	2,286.77
11	2,286.34	2,286.20	2,286.35	2,286.45	2,286.66	2,286.75	2,287.46	2,287.51	2,287.60	2,287.05	2,286.50	2,286.74
12	2,286.34	2,286.19	2,286.34	2,286.45	2,286.70	2,286.73	2,287.45	2,287.46	2,287.62	2,287.05	2,286.50	2,286.72
13	2,286.33	2,286.18	2,286.33	2,286.43	2,286.71	2,286.75	2,287.45	2,287.46	2,287.60	2,287.01	2,286.48	2,286.69
14	2,286.32	2,286.19	2,286.33	2,286.44	2,286.72	2,286.74	2,287.46	2,287.44	2,287.58	2,286.98	2,286.45	2,286.68
15	2,286.33	2,286.19	2,286.33	2,286.44	2,286.72	2,286.74	2,287.47	2,287.44	2,287.57	2,286.96	2,286.44	2,286.66
16	2,286.32	2,286.20	2,286.34	2,286.43	2,286.73	2,286.76	2,287.48	2,287.41	2,287.56	2,286.92	2,286.42	2,286.62
17	2,286.32	2,286.22	2,286.34	2,286.43	2,286.73	2,286.73	2,287.50	2,287.41	2,287.54	2,286.97	2,286.51	2,286.60
18	2,286.31	2,286.29	2,286.32	2,286.44	2,286.73	2,286.72	2,287.50	2,287.38	2,287.53	2,286.91	2,286.51	2,286.60
19	2,286.31	2,286.30	2,286.34	2,286.45	2,286.74	2,286.72	2,287.50	2,287.37	2,287.52	2,286.89	2,286.53	2,286.59
20	2,286.31	2,286.29	2,286.34	2,286.46	2,286.75	2,286.71	2,287.49	2,287.36	2,287.50	2,286.85	2,286.51	2,286.57
21	2,286.31	2,286.30	2,286.32	2,286.46	2,286.74	2,286.93	2,287.52	2,287.33	2,287.49	2,286.81	2,286.52	2,286.55
22	2,286.32	2,286.30	2,286.32	2,286.46	2,286.76	2,286.97	2,287.46	2,287.32	2,287.47	2,286.79	2,286.52	2,286.53
23	2,286.30	2,286.28	2,286.33	2,286.47	2,286.77	2,286.99	2,287.46	2,287.35	2,287.43	2,286.74	2,286.50	2,286.52
24	2,286.28	2,286.30	2,286.33	2,286.48	2,286.77	2,287.01	2,287.47	2,287.38	2,287.45	2,286.71	2,286.53	2,286.50
25	2,286.27	2,286.30	2,286.33	2,286.49	2,286.76	2,287.01	2,287.47	2,287.38	2,287.41	2,286.71	2,286.63	2,286.49
26	2,286.27	2,286.32	2,286.33	2,286.48	2,286.78	2,287.03	2,287.46	2,287.38	2,287.36	2,286.83	2,286.55	2,286.47
27	2,286.28	2,286.30	2,286.34	2,286.49	2,286.78	2,287.05	2,287.46	2,287.37	2,287.33	2,286.81	2,286.48	2,286.45
28	2,286.29	2,286.32	2,286.34	2,286.51	2,286.76	2,287.06	2,287.51	2,287.39	2,287.31	2,286.79	2,286.54	2,286.43
29	2,286.29	2,286.33	2,286.35	2,286.52	---	2,287.07	2,287.53	2,287.43	2,287.27	2,286.75	2,286.54	2,286.40
30	2,286.25	2,286.33	2,286.36	2,286.52	---	2,287.09	2,287.53	2,287.44	2,287.24	2,286.71	2,286.53	2,286.40
31	2,286.24	---	2,286.36	2,286.53	---	2,287.08	---	2,287.49	---	2,286.69	2,286.50	---
MEAN	2,286.31	2,286.24	2,286.34	2,286.45	2,286.69	2,286.85	2,287.41	2,287.44	2,287.50	2,286.95	2,286.53	2,286.58
MAX	2,286.34	2,286.33	2,286.36	2,286.53	2,286.78	2,287.09	2,287.53	2,287.52	2,287.63	2,287.22	2,286.68	2,286.82
MIN	2,286.24	2,286.18	2,286.32	2,286.35	2,286.54	2,286.71	2,287.09	2,287.32	2,287.24	2,286.69	2,286.42	2,286.40
(+)	8,130	8,210	8,230	8,370	8,570	8,840	9,230	9,200	8,980	8,510	8,350	8,260
(#)	-120	-80	+20	+140	+190	+270	+390	-30	-220	-470	-160	-90

CAL YR 2004 (#) -920
WTR YR 2005 (#) +10

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

KANSAS RIVER BASIN

63

06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS

LOCATION.--Lat 39°59'09", long 99°28'24", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.9, T.1 S., R.19 W., Phillips County, Hydrologic Unit 10250015, on left bank at downstream side of bridge on U.S. Highway 383, 1.0 mi south of Kansas-Nebraska State line, 2.5 mi west of Woodruff, and at mile 26.5.

DRAINAGE AREA.--1,007 mi².

PERIOD OF RECORD.--October 1928 to September 1932, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,016.20 ft above NGVD of 1929. See WSP 1919 for history of changes prior to Oct. 7, 1955.

REMARKS.--Records poor. Flow regulated to some extent since 1964 by Keith Sebelius Lake (station 06847950), 48.4 mi upstream, and by irrigation development upstream from station. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e12	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e32	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e67	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	e88	0.00	e15	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	e813	0.00	e5.4	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	e312	0.00	e4.2	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	e95	0.00	e3.7	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	e36	0.00	e2.6	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	e19	0.00	e3.0	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	e44	0.00	e11	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	e66	0.00	e4.0	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	e30	0.00	e1.5	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	e6.5	0.00	e0.52	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	e2.1	0.00	e0.49	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	e1.2	0.00	e0.33	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	e0.74	e0.83	e0.19	0.00	e9.3	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	e0.58	e19	e0.15	0.00	e15	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	e0.52	e0.04	e0.04	0.00	e1.4	0.00
20	0.00	0.00	0.20	0.00	0.00	0.00	e0.33	0.00	e0.01	0.00	e0.02	0.00
21	0.00	0.00	0.00	0.00	0.03	0.00	e0.26	0.00	e0.01	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	e0.11	0.00	e0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	e0.03	0.00	e0.00	0.00	e5.7	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	e0.41	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.01	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
MEAN	0.00	0.00	0.00	0.01	0.00	0.00	50.5	0.64	5.44	0.00	1.03	0.00
MAX	0.00	0.00	0.20	0.00	0.03	813	19	67	0.01	15	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.4	0.00	0.06	3,010	39	324	0.02	63	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

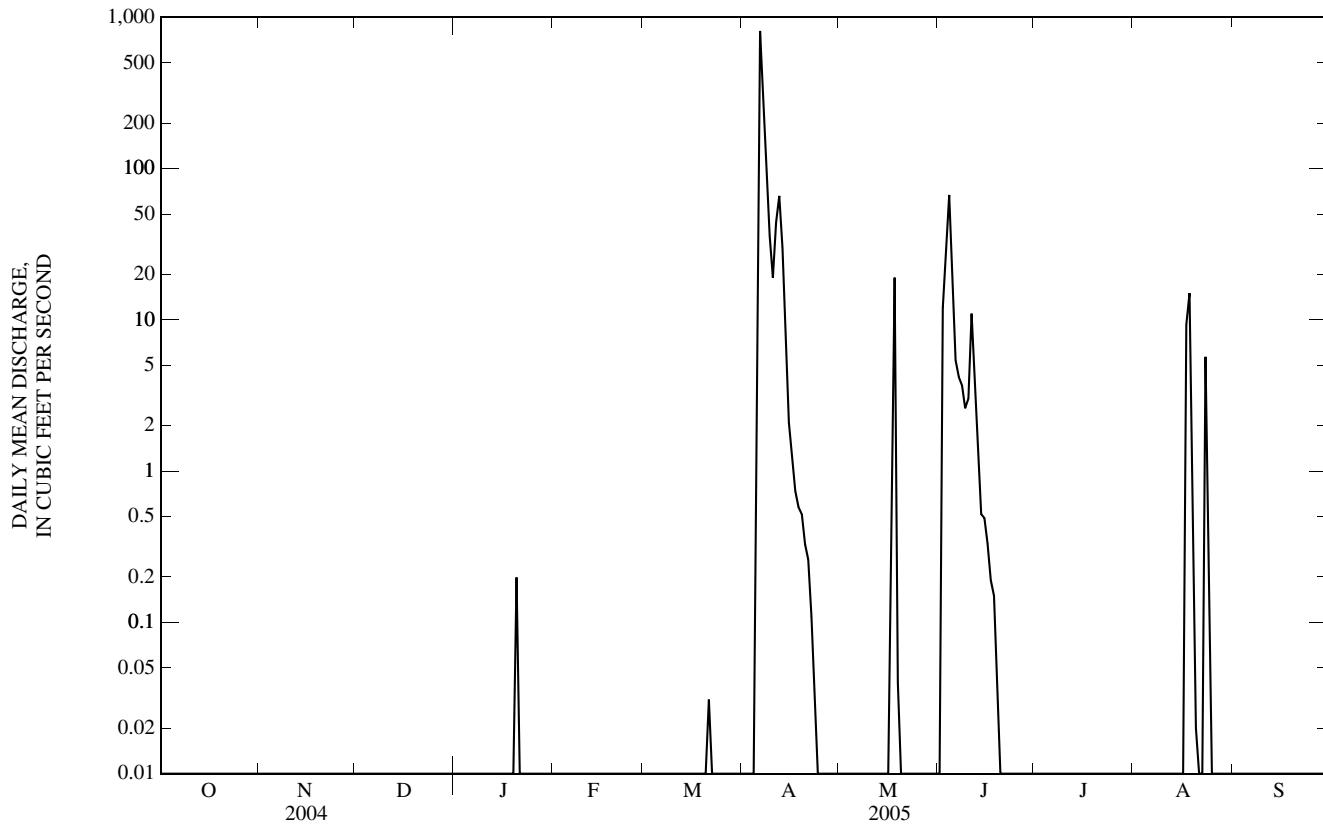
MEAN	18.1	6.25	5.23	5.28	15.3	16.9	10.6	40.5	81.7	58.4	32.6	21.6
(WY)	429	56.5	26.0	22.5	230	240	50.5	422	1,041	1,070	430	402
(1947)	(1931)	(1947)	(1931)	(1932)	(1960)	(2005)	(1949)	(1947)	(1951)	(1950)	(1951)	(1951)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1955)	(1956)	(1956)	(1956)	(1957)	(1957)	(1985)	(1992)	(1984)	(1984)	(1959)	(1960)

KANSAS RIVER BASIN

06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1929 - 2005
ANNUAL MEAN	0.20	4.74	25.3
HIGHEST ANNUAL MEAN			208
LOWEST ANNUAL MEAN			0.05
HIGHEST DAILY MEAN	11	May 18	9,700
LOWEST DAILY MEAN	0.00	Jan 1	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00
MAXIMUM PEAK FLOW		813	15,000
MAXIMUM PEAK STAGE		Apr 6	Jun 23, 1947
INSTANTANEOUS LOW FLOW		e1,380	21.04
ANNUAL RUNOFF (AC-FT)	147	Apr 6	Jun 23, 1947
10 PERCENT EXCEEDS	0.08	Oct 1	most years
50 PERCENT EXCEEDS	0.00		3.8
90 PERCENT EXCEEDS	0.00		0.00

e Estimated



KANSAS RIVER BASIN

65

06853500 REPUBLICAN RIVER NEAR HARDY, NE

LOCATION.--Lat 39°59'33", long 97°55'56", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.1 S., R.6 W., in Kansas, Republic County, Hydrologic Unit 10250016, on right bank at upstream side of county highway bridge, 1.2 mi southwest of Hardy, NE, and at mile 141.2.

DRAINAGE AREA.--22,401 mi², of which about 7,500 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1904 to September 1915 (no winter records), April 1931 to current year. Prior to May 1932, published as "at Bostwick." Records for June 1896 to November 1903 published as "near Superior" in 18th to 22nd Ann. Repts., inclusive, Pt. 4, and WSP 75, 84, and 99, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 806: Drainage area. WSP 1006: 1941. WSP 1340: 1905(M), 1907-09, 1912, 1914-15, 1931. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 1,501.46 ft above NGVD of 1929. Prior to May 19, 1932, nonrecording gage at site at Bostwick, 20 mi upstream at different datum.

REMARKS.--Records good above 2 ft³/s and fair below and those for estimated daily discharges, which are poor. Natural flow affected by irrigation development upstream from station and by storage in reservoirs in Colorado, Kansas, and Nebraska. Considerable regulation since 1952 by Harlan County Lake (station 06849000). Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stages since at least 1895, that of June 2, 1935, 19.40 ft, discharge, 225,000 ft³/s, and June 24, 1947, 17.00 ft, discharge, 100,000 ft³/s, based on records for upstream stations.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	18	25	28	e35	27	32	32	21	3.3	7.7	16
2	14	18	26	27	32	27	31	31	20	3.0	4.2	16
3	14	19	26	27	31	28	31	31	27	3.2	4.1	14
4	13	20	26	25	31	27	31	31	27	3.6	6.1	11
5	e13	20	26	e24	31	27	31	30	23	2.6	8.9	15
6	e13	21	27	e24	36	27	34	30	22	1.8	8.4	17
7	e14	21	26	e25	39	26	33	29	20	1.2	7.0	15
8	e14	21	26	e25	37	27	31	28	20	1.1	4.0	13
9	e14	21	26	e25	e36	27	31	28	20	0.81	4.2	11
10	e15	21	25	e25	e36	27	32	28	32	4.9	4.0	10
11	e15	22	25	e25	e36	26	41	27	28	1.3	3.8	9.8
12	e15	22	25	e25	35	26	39	34	25	1.7	4.8	9.4
13	e15	23	25	e25	37	26	39	30	24	1.6	29	8.9
14	16	23	e25	e24	36	27	37	29	23	2.0	15	8.6
15	16	23	e25	e24	33	27	35	31	23	0.70	11	8.8
16	16	23	27	e24	31	27	34	29	22	0.64	13	8.7
17	16	23	26	e25	30	27	34	27	22	0.57	129	8.7
18	16	23	26	e26	29	27	33	26	17	6.5	234	8.0
19	16	26	26	e27	30	27	63	24	15	2.3	71	7.6
20	16	25	25	e28	30	27	51	23	79	2.3	66	7.3
21	17	25	27	e29	29	42	38	22	56	0.93	34	6.9
22	17	24	24	e27	28	68	35	e21	25	0.61	42	6.4
23	16	24	e25	e27	28	62	32	e20	17	0.52	87	6.5
24	16	24	e24	e28	28	50	31	e18	12	0.41	36	6.5
25	16	24	e25	e30	28	44	31	18	9.9	0.65	43	6.0
26	17	24	e25	e30	27	41	32	17	8.1	34	37	5.7
27	17	25	e25	e30	27	38	32	16	5.8	120	31	5.4
28	17	25	e25	e30	27	35	33	18	5.1	243	24	5.6
29	17	26	e25	e30	---	33	34	20	4.4	95	21	5.7
30	17	26	e27	e30	---	33	33	19	4.7	35	19	5.8
31	18	---	30	e32	---	33	---	20	---	16	17	---
MEAN	15.5	22.7	25.7	26.8	31.9	32.8	35.1	25.4	21.9	19.1	33.1	9.48
MAX	18	26	30	32	39	68	63	34	79	243	234	17
MIN	13	18	24	24	27	26	31	16	4.4	0.41	3.8	5.4
AC-FT	950	1,350	1,580	1,650	1,770	2,020	2,090	1,560	1,310	1,170	2,040	564

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2005, BY WATER YEAR (WY)

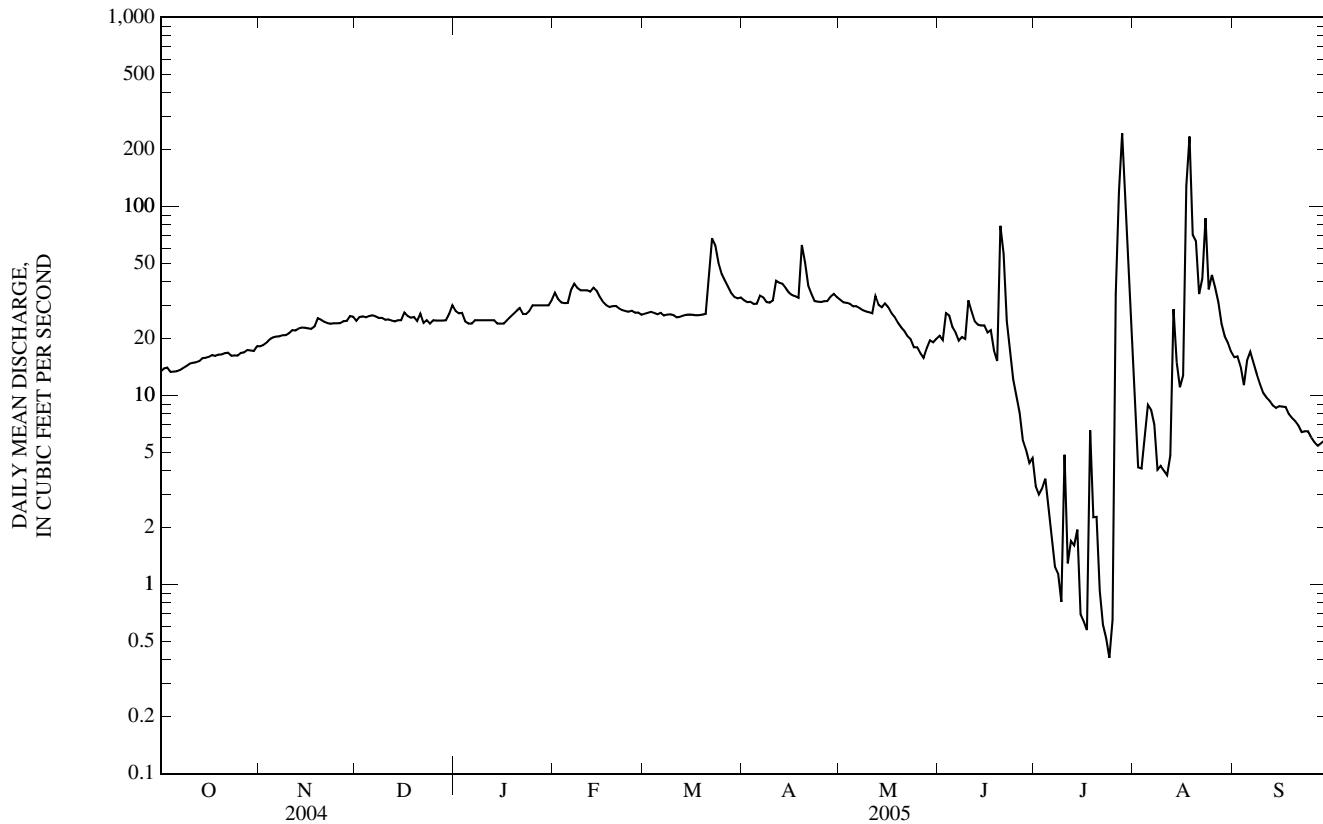
MEAN	258	215	187	179	280	394	413	458	461	483	292	294
(WY)	1,970	1,308	928	636	968	1,584	2,415	2,523	2,031	3,210	1,800	1,455
(1966)	(1994)	(1994)	(1966)	(1966)	(1993)	(1993)	(1960)	(1960)	(1960)	(1993)	(1962)	(1973)
MIN	15.5	22.3	20.0	23.2	27.0	32.8	35.1	25.4	21.9	19.1	24.4	9.48
(WY)	(2005)	(1992)	(2003)	(2003)	(1992)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2005)

KANSAS RIVER BASIN

06853500 REPUBLICAN RIVER NEAR HARDY, NE—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1958 - 2005
ANNUAL MEAN	58.3	24.9	326
HIGHEST ANNUAL MEAN			800
LOWEST ANNUAL MEAN			24.9
HIGHEST DAILY MEAN	943	Jul 3	15,000
LOWEST DAILY MEAN	7.9	Aug 28	0.41
ANNUAL SEVEN-DAY MINIMUM	8.6	Aug 27	1.1
MAXIMUM PEAK FLOW			225,000
MAXIMUM PEAK STAGE			19.40
INSTANTANEOUS LOW FLOW			0.00
ANNUAL RUNOFF (AC-FT)	42,290	18,040	236,400
10 PERCENT EXCEEDS	137	35	734
50 PERCENT EXCEEDS	27	25	159
90 PERCENT EXCEEDS	15	5.7	42

e Estimated



KANSAS RIVER BASIN

67

06853800 WHITE ROCK CREEK NEAR BURR OAK, KS

LOCATION.--Lat 39°53'57", long 98°15'00", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.7, T.2 S., R.8 W., Jewell County, Hydrologic Unit 10250016, on left bank at upstream side of county highway bridge, 3.5 mi northeast of Burr Oak, and at mile 35.4.

DRAINAGE AREA.--227 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955-57, October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,601.5 ft above NGVD of 1929 (levels by Bureau of Reclamation).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum known stage since at least 1869, 32.6 ft, July 9, 1950, from floodmark 300 ft downstream and information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jul 26	1500	*855	*12.30				No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.08	0.26	0.45	0.65	1.5	1.4	2.0	2.0	0.68	0.14	6.0	0.12
2	0.09	0.25	0.48	0.54	1.3	1.6	1.8	2.1	0.76	0.15	3.1	2.1
3	0.08	0.26	0.50	e0.50	1.2	1.6	1.6	1.9	1.1	0.16	1.6	3.3
4	0.09	0.27	0.56	0.49	1.3	1.6	1.6	2.0	0.94	0.11	0.77	1.4
5	0.09	0.27	0.55	0.42	1.6	1.6	1.5	2.1	0.84	0.09	0.50	0.97
6	0.12	0.29	0.61	0.49	1.7	1.8	2.1	2.2	0.66	0.09	0.32	0.85
7	0.20	0.30	0.50	0.53	e1.4	1.8	2.0	2.1	1.6	0.08	0.24	0.54
8	0.17	0.29	0.49	0.56	e1.3	1.7	2.1	2.0	3.0	0.29	0.19	0.73
9	0.12	0.31	0.48	0.61	e1.2	1.7	2.0	1.8	2.0	0.29	0.14	0.70
10	0.10	0.35	0.48	0.61	e1.2	1.6	2.1	1.7	3.5	0.13	0.09	0.59
11	0.10	0.35	0.44	0.63	1.6	1.6	2.9	1.5	5.4	0.08	0.06	0.27
12	0.11	0.30	0.52	0.65	1.7	1.7	3.3	1.4	6.9	0.04	0.05	0.23
13	0.13	0.31	0.44	0.65	2.3	1.8	3.4	1.4	2.4	0.04	0.23	0.18
14	0.14	0.34	0.34	0.57	2.1	1.7	3.1	1.3	1.2	0.03	0.24	0.15
15	0.15	0.37	0.48	0.46	2.1	1.7	2.8	1.2	1.1	0.01	0.17	0.13
16	0.17	0.46	0.50	e0.40	e2.2	1.7	2.4	1.2	0.78	0.01	0.13	0.12
17	0.16	0.46	0.50	e0.40	e2.2	1.7	2.2	1.0	0.60	0.00	17	0.11
18	0.17	0.54	0.53	e0.45	e2.6	2.0	2.1	0.91	0.49	0.20	43	0.11
19	0.16	0.60	0.45	e0.70	3.1	1.7	2.1	1.2	0.42	0.39	7.9	0.08
20	0.15	0.48	0.56	e1.0	2.5	1.7	2.2	1.0	0.44	0.41	13	0.09
21	0.17	0.40	e0.45	e0.80	1.9	2.5	2.3	0.85	0.35	0.39	10	0.06
22	0.20	0.43	0.38	e0.60	1.5	4.5	2.2	0.69	0.31	0.40	58	0.03
23	0.20	0.44	0.30	e0.50	1.4	5.3	2.0	0.60	0.28	0.31	140	0.02
24	0.21	0.43	0.26	0.57	1.3	8.8	2.0	0.53	0.24	0.25	30	0.02
25	0.20	0.45	0.27	0.70	1.3	8.8	2.0	0.52	0.20	0.21	6.6	0.01
26	0.20	0.51	0.30	0.89	1.4	7.2	2.0	0.48	0.17	456	2.0	0.01
27	0.21	0.53	0.41	0.77	1.5	5.0	2.0	0.47	0.14	389	0.85	0.00
28	0.22	0.47	0.54	0.77	1.4	3.7	2.2	0.49	0.20	223	0.43	0.00
29	0.23	0.49	0.64	0.84	---	2.9	2.0	0.55	0.21	56	0.26	0.00
30	0.23	0.48	0.91	1.6	---	2.7	2.1	0.57	0.18	23	0.20	0.00
31	0.24	---	0.67	1.7	---	2.3	---	0.62	---	12	0.15	---
MEAN	0.16	0.39	0.48	0.68	1.71	2.82	2.20	1.24	1.24	37.5	11.1	0.43
MAX	0.24	0.60	0.91	1.7	3.1	8.8	3.4	2.2	6.9	456	140	3.3
MIN	0.08	0.25	0.26	0.40	1.2	1.4	1.5	0.47	0.14	0.00	0.05	0.00
AC-FT	9.7	23	30	42	95	173	131	76	74	2,310	681	26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2005, BY WATER YEAR (WY)

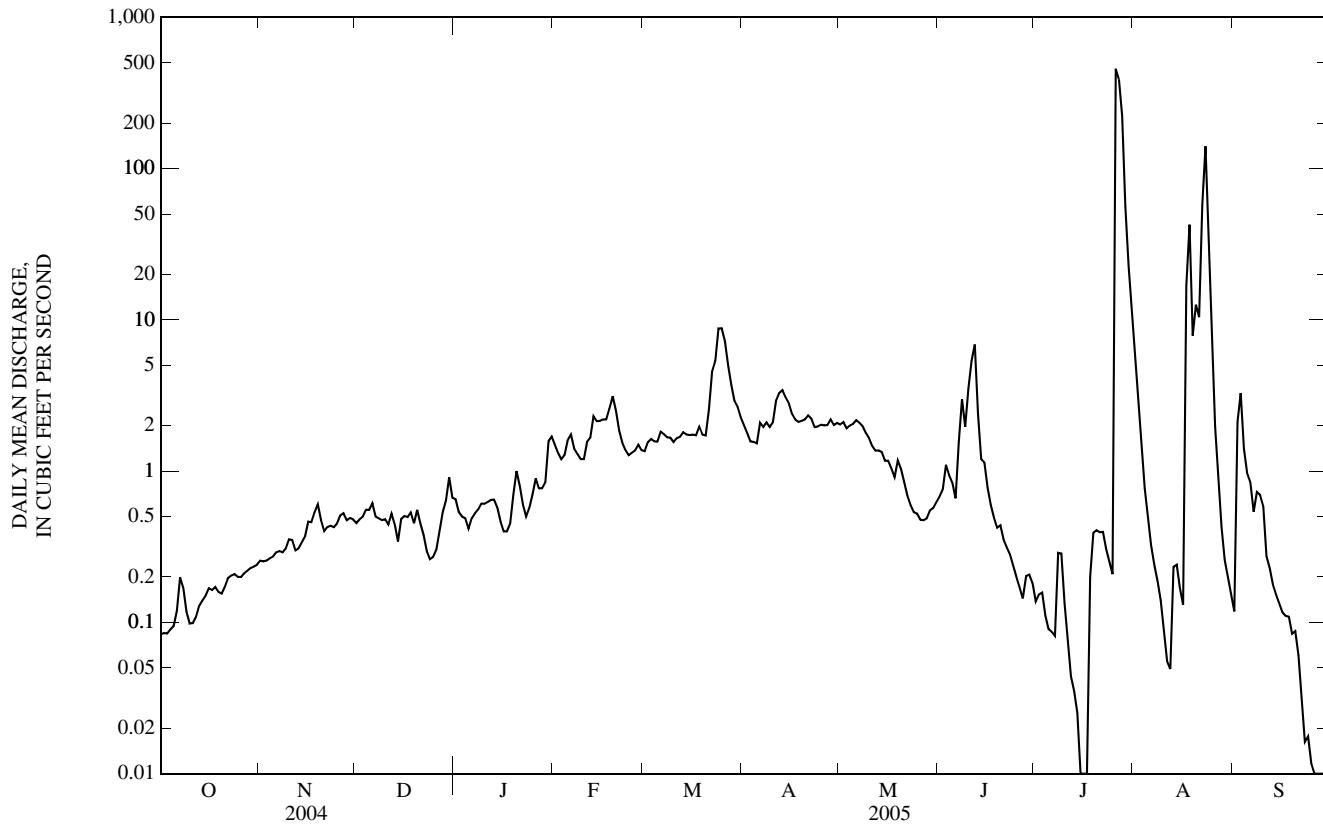
MEAN	16.5	10.8	7.77	11.7	21.2	36.3	29.0	41.6	47.0	48.2	19.6	30.3
(WY)	319	120	43.5	125	143	318	236	174	257	658	166	519
MIN	0.00	0.03	0.08	0.11	0.51	0.75	0.89	0.91	0.97	0.03	0.01	0.00
(WY)	(1974)	(1997)	(1994)	(1962)	(1993)	(1993)	(1987)	(1985)	(1961)	(1993)	(1993)	(1973)

KANSAS RIVER BASIN

06853800 WHITE ROCK CREEK NEAR BURR OAK, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1958 - 2005
ANNUAL MEAN	2.81	5.07	26.7
HIGHEST ANNUAL MEAN			136
LOWEST ANNUAL MEAN			2.71
HIGHEST DAILY MEAN	212	Jul 8	6,000
LOWEST DAILY MEAN	0.03	Sep 11	0.00
ANNUAL SEVEN-DAY MINIMUM	0.04	Sep 8	0.01
MAXIMUM PEAK FLOW		855	15,800
MAXIMUM PEAK STAGE		12.30	25.06
INSTANTANEOUS LOW FLOW		0.00	0.00
ANNUAL RUNOFF (AC-FT)	2,040	3,670	19,320
10 PERCENT EXCEEDS	2.3	2.7	37
50 PERCENT EXCEEDS	0.41	0.57	5.5
90 PERCENT EXCEEDS	0.08	0.12	0.30

e Estimated



06853900 LOVEWELL RESERVOIR NEAR LOVEWELL, KS

LOCATION.--Lat $39^{\circ}53'04''$, long $98^{\circ}01'41''$, in NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.18, T.2 S., R.6 W., Jewell County, Hydrologic Unit 10250016, at south end of Lovewell Dam on White Rock Creek, 3 mi northwest of Lovewell, and at mile 19.3.

DRAINAGE AREA.--345 mi².

PERIOD OF RECORD.--May 1957 to current year. Monthly records only, May to September 1957.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by Bureau of Reclamation). From June 15, 1960, to May 6, 1975, water-stage recorder at north end of dam at same datum.

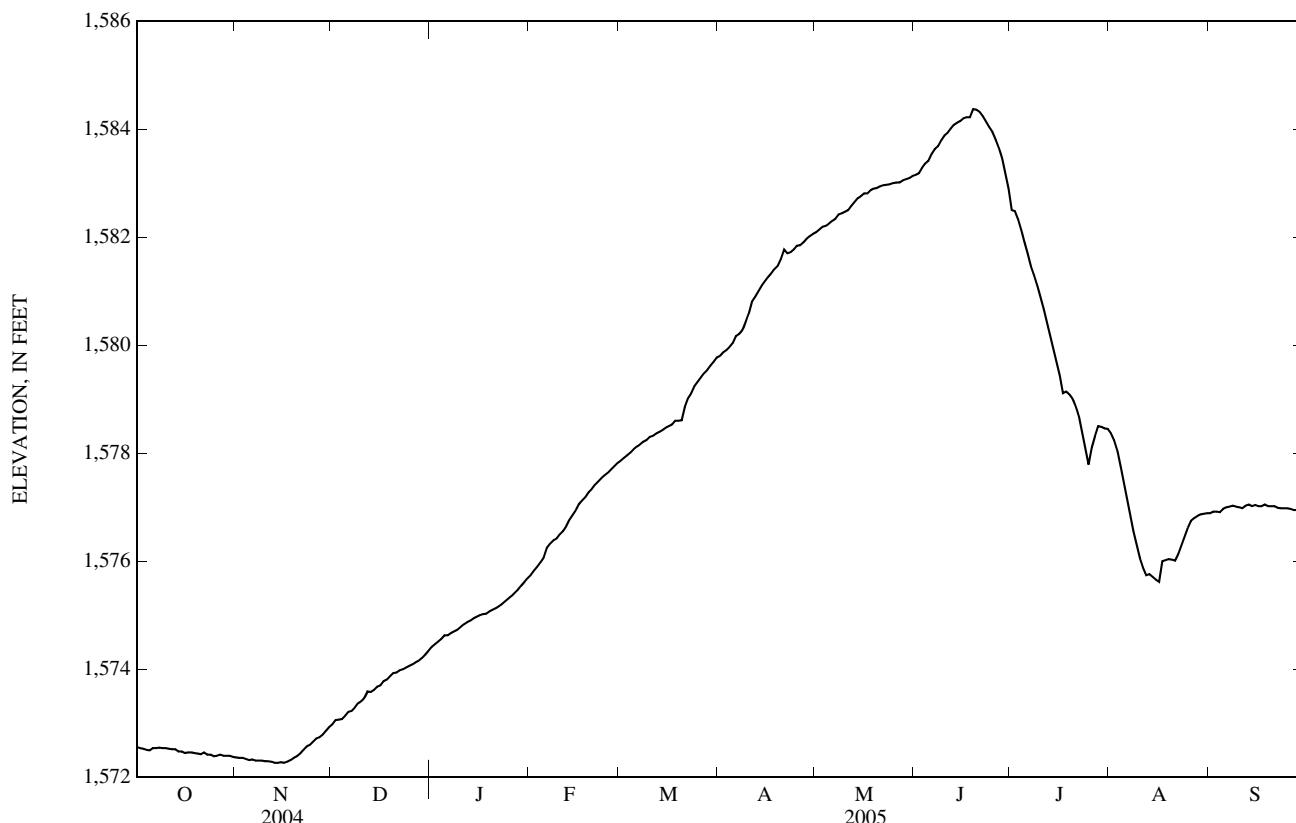
REMARKS.--Records good. Reservoir is formed by earthfill dam. Closure was made May 29, 1957. Irrigation pool elevation was first reached on May 19, 1958. Total capacity of 180,300 acre-ft consists of the following: Dead storage, 1,660 acre-ft below elevation 1,562.07 ft; irrigation pool, 34,010 acre-ft between elevations 1,562.07 ft and 1,582.6 ft; flood-control pool, 50,460 acre-ft between elevations 1,582.6 ft and 1,595.3 ft; and surcharge pool, 94,170 acre-ft between elevations 1,595.3 ft and 1,610.3 ft. Storage in reservoir is derived from White Rock Creek and diversion from the Republican River through upper Courtland Canal. Releases are made into White Rock Creek and for irrigation of 30,000 acres through lower Courtland Canal. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,595.38 ft, July 22, 1993, contents, 92,560 acre-ft; minimum elevation since irrigation pool was first reached, 1,570.21 ft, Aug. 21, 1991, contents 14,330 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,584.42 ft, June 20, contents, 41,350 acre-ft; minimum elevation, 1,572.26 ft, Nov. 15, contents, 12,500 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Computed by Bureau of Reclamation on basis of resurvey made in 1995)

Elevation	Contents	Elevation	Contents	Elevation	Contents
1,572	12,100	1,578	23,500	1,584	40,000
1,574	15,370	1,580	28,410	1,586	46,700
1,576	19,150	1,582	33,900		



KANSAS RIVER BASIN

06853900 LOVEWELL RESERVOIR NEAR LOVEWELL, KS—Continued

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,572.56	1,572.37	1,572.98	1,574.41	1,575.75	1,577.86	1,579.80	1,582.09	1,583.15	1,582.50	1,578.37	1,576.89
2	1,572.54	1,572.36	1,573.06	1,574.46	1,575.83	1,577.91	1,579.87	1,582.14	1,583.18	1,582.48	1,578.24	1,576.92
3	1,572.53	1,572.36	1,573.07	1,574.51	1,575.90	1,577.96	1,579.91	1,582.19	1,583.28	1,582.33	1,578.04	1,576.92
4	1,572.51	1,572.34	1,573.08	1,574.56	1,575.98	1,578.01	1,579.97	1,582.21	1,583.36	1,582.13	1,577.75	1,576.91
5	1,572.50	1,572.32	1,573.14	1,574.63	1,576.07	1,578.07	1,580.04	1,582.25	1,583.41	1,581.90	1,577.43	1,576.97
6	1,572.54	1,572.33	1,573.21	1,574.63	1,576.25	1,578.12	1,580.17	1,582.30	1,583.54	1,581.69	1,577.13	1,577.00
7	1,572.54	1,572.31	1,573.23	1,574.67	1,576.33	1,578.16	1,580.21	1,582.34	1,583.63	1,581.46	1,576.83	1,577.01
8	1,572.55	1,572.31	1,573.29	1,574.70	1,576.39	1,578.21	1,580.28	1,582.42	1,583.68	1,581.29	1,576.55	1,577.03
9	1,572.54	1,572.31	1,573.37	1,574.73	1,576.42	1,578.24	1,580.43	1,582.44	1,583.79	1,581.10	1,576.30	1,577.01
10	1,572.54	1,572.30	1,573.41	1,574.78	1,576.50	1,578.30	1,580.59	1,582.47	1,583.88	1,580.89	1,576.06	1,577.00
11	1,572.53	1,572.30	1,573.47	1,574.83	1,576.56	1,578.32	1,580.81	1,582.50	1,583.93	1,580.67	1,575.88	1,576.98
12	1,572.52	1,572.29	1,573.59	1,574.87	1,576.65	1,578.36	1,580.90	1,582.58	1,584.01	1,580.43	1,575.74	1,577.03
13	1,572.52	1,572.27	1,573.58	1,574.90	1,576.77	1,578.39	1,581.00	1,582.65	1,584.08	1,580.20	1,575.76	1,577.05
14	1,572.48	1,572.27	1,573.62	1,574.94	1,576.86	1,578.43	1,581.10	1,582.72	1,584.12	1,579.96	1,575.71	1,577.02
15	1,572.48	1,572.28	1,573.68	1,574.97	1,576.95	1,578.47	1,581.18	1,582.76	1,584.15	1,579.71	1,575.66	1,577.04
16	1,572.45	1,572.27	1,573.70	1,575.00	1,577.06	1,578.50	1,581.26	1,582.81	1,584.20	1,579.44	1,575.62	1,577.02
17	1,572.46	1,572.29	1,573.78	1,575.02	1,577.13	1,578.53	1,581.33	1,582.81	1,584.22	1,579.11	1,576.00	1,577.02
18	1,572.46	1,572.32	1,573.81	1,575.03	1,577.19	1,578.60	1,581.41	1,582.87	1,584.22	1,579.14	1,576.02	1,577.05
19	1,572.45	1,572.36	1,573.87	1,575.07	1,577.28	1,578.60	1,581.47	1,582.90	1,584.37	1,579.09	1,576.04	1,577.02
20	1,572.44	1,572.39	1,573.93	1,575.10	1,577.34	1,578.61	1,581.60	1,582.91	1,584.36	1,579.01	1,576.03	1,577.02
21	1,572.43	1,572.44	1,573.94	1,575.13	1,577.42	1,578.86	1,581.77	1,582.94	1,584.32	1,578.87	1,576.01	1,577.02
22	1,572.46	1,572.51	1,573.98	1,575.17	1,577.48	1,579.02	1,581.70	1,582.96	1,584.24	1,578.68	1,576.13	1,576.99
23	1,572.42	1,572.57	1,574.00	1,575.21	1,577.54	1,579.11	1,581.72	1,582.97	1,584.14	1,578.38	1,576.30	1,576.98
24	1,572.42	1,572.60	1,574.03	1,575.26	1,577.59	1,579.24	1,581.77	1,582.98	1,584.04	1,578.08	1,576.46	1,576.98
25	1,572.39	1,572.66	1,574.06	1,575.31	1,577.64	1,579.32	1,581.84	1,583.00	1,583.95	1,577.79	1,576.62	1,576.98
26	1,572.40	1,572.72	1,574.09	1,575.36	1,577.70	1,579.40	1,581.85	1,583.01	1,583.81	1,578.10	1,576.75	1,576.97
27	1,572.42	1,572.74	1,574.13	1,575.42	1,577.76	1,579.48	1,581.90	1,583.01	1,583.66	1,578.31	1,576.80	1,576.95
28	1,572.40	1,572.79	1,574.16	1,575.48	1,577.82	1,579.54	1,581.97	1,583.05	1,583.46	1,578.50	1,576.84	1,576.95
29	1,572.40	1,572.86	1,574.21	1,575.55	---	1,579.62	1,582.02	1,583.07	1,583.19	1,578.49	1,576.87	1,576.93
30	1,572.40	1,572.93	1,574.27	1,575.62	---	1,579.69	1,582.06	1,583.09	1,582.90	1,578.46	1,576.88	1,576.92
31	1,572.38	---	1,574.34	1,575.69	---	1,579.77	---	1,583.13	---	1,578.45	1,576.89	---
MEAN	1,572.47	1,572.44	1,573.68	1,575.00	1,576.86	1,578.67	1,581.06	1,582.70	1,583.81	1,579.89	1,576.57	1,576.99
MAX	1,572.56	1,572.93	1,574.34	1,575.69	1,577.82	1,579.77	1,582.06	1,583.13	1,584.37	1,582.50	1,578.37	1,577.05
MIN	1,572.38	1,572.27	1,572.98	1,574.41	1,575.75	1,577.86	1,579.80	1,582.09	1,582.90	1,577.79	1,575.62	1,576.89
(+)	12,680	13,560	15,980	18,530	23,080	27,820	34,080	37,270	36,570	24,560	21,020	21,080
(#)	-350	+880	+2,400	+2,550	+4,550	+4,740	+6,260	+3,190	-700	-12,010	-3,540	+60

CAL YR 2004 (#) -12,400

WTR YR 2005 (#) +8,040

CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

KANSAS RIVER BASIN

71

06856000 REPUBLICAN RIVER AT CONCORDIA, KS

LOCATION.--Lat 39°35'19", long 97°39'29", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.28, T.5 S., R.3 W., Cloud County, Hydrologic Unit 10250017, on right bank at upstream side of bridge on U.S. Highway 81, 1.0 mi north of Concordia, 4.9 mi downstream from Buffalo Creek, and at mile 98.5.

DRAINAGE AREA.--23,560 mi², of which about 7,500 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1310. Gage-height records collected at nearby sites since 1951 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 1340: 1946-47.

GAGE.--Water-stage recorder. Datum of gage is 1,328.62 ft above NGVD of 1929. Apr. 25, 1946, to Mar. 3, 1983, at site about 100 ft downstream, datum 5.0 ft higher. Apr. 11, 1983, to Sept. 30, 1987, at present site, at datum 5.0 ft higher. June 22, 1998, gage moved for bridge construction to right bank on downstream side of bridge, at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by irrigation development upstream from station and by storage in seven reservoirs in Colorado, Nebraska, and Kansas. Considerable regulation since 1952 by Harlan County Lake (station 06849000). Flow was affected by bridge construction May 1998 to June 1999. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1895, about 23 ft, June 2, 1935, present site and datum, from information by U.S. Weather Bureau, discharge, about 207,000 ft³/s, on basis of records for stations upstream. Flood of June 21, 1915, reached a stage of 19.1 ft, present site and datum, from information by U.S. Weather Bureau, discharge, about 60,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	38	53	e48	e38	66	85	82	49	58	152	77
2	83	39	52	e48	e38	73	72	79	50	69	86	73
3	52	42	55	e46	e38	67	69	81	59	96	e59	66
4	53	43	56	e45	e40	63	65	74	58	75	e49	58
5	50	44	57	e44	e45	61	63	71	58	62	e49	51
6	42	44	57	e44	e48	59	89	69	55	56	e68	49
7	42	44	56	e44	e50	58	985	66	48	55	e71	49
8	41	45	56	e46	e46	59	598	68	43	54	e75	44
9	40	45	56	e46	e44	65	266	68	44	47	e68	41
10	39	49	56	e46	e46	63	173	61	123	38	56	39
11	37	50	54	e46	e46	57	167	64	349	32	51	33
12	36	48	55	e46	e55	65	175	76	158	28	58	29
13	38	47	56	e40	e90	61	227	79	128	30	73	27
14	37	50	54	e35	119	56	306	96	98	40	624	28
15	35	49	50	e35	114	56	318	92	78	38	272	29
16	37	48	51	e35	105	54	274	84	71	29	206	28
17	36	48	60	e38	96	53	233	68	71	31	138	26
18	35	50	60	e40	85	53	195	62	94	51	226	25
19	34	51	57	e40	80	53	152	60	54	99	802	24
20	35	52	52	e40	79	52	135	55	52	62	343	23
21	35	52	e50	e40	75	70	210	54	43	31	206	21
22	35	52	e50	e38	77	85	233	51	47	24	155	20
23	37	52	e48	e36	75	117	198	48	54	24	321	19
24	35	52	e48	e38	72	141	147	47	36	24	1,050	19
25	35	51	e50	e39	70	140	109	44	33	31	481	19
26	35	52	e50	e38	70	128	100	43	29	312	245	17
27	35	56	e50	e38	69	111	94	42	28	2,000	183	17
28	36	55	e50	e38	67	96	99	46	27	878	142	17
29	35	58	e48	e38	---	87	93	43	26	457	113	17
30	37	57	48	e38	---	81	88	46	59	319	93	16
31	38	---	e48	e38	---	79	---	47	---	243	85	---
MEAN	41.5	48.8	53.0	41.0	67.0	75.1	201	63.4	70.7	174	213	33.4
MAX	93	58	60	48	119	141	985	96	349	2,000	1,050	77
MIN	34	38	48	35	38	52	63	42	26	24	49	16
AC-FT	2,550	2,900	3,260	2,520	3,720	4,620	11,940	3,900	4,210	10,700	13,090	1,990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2005, BY WATER YEAR (WY)

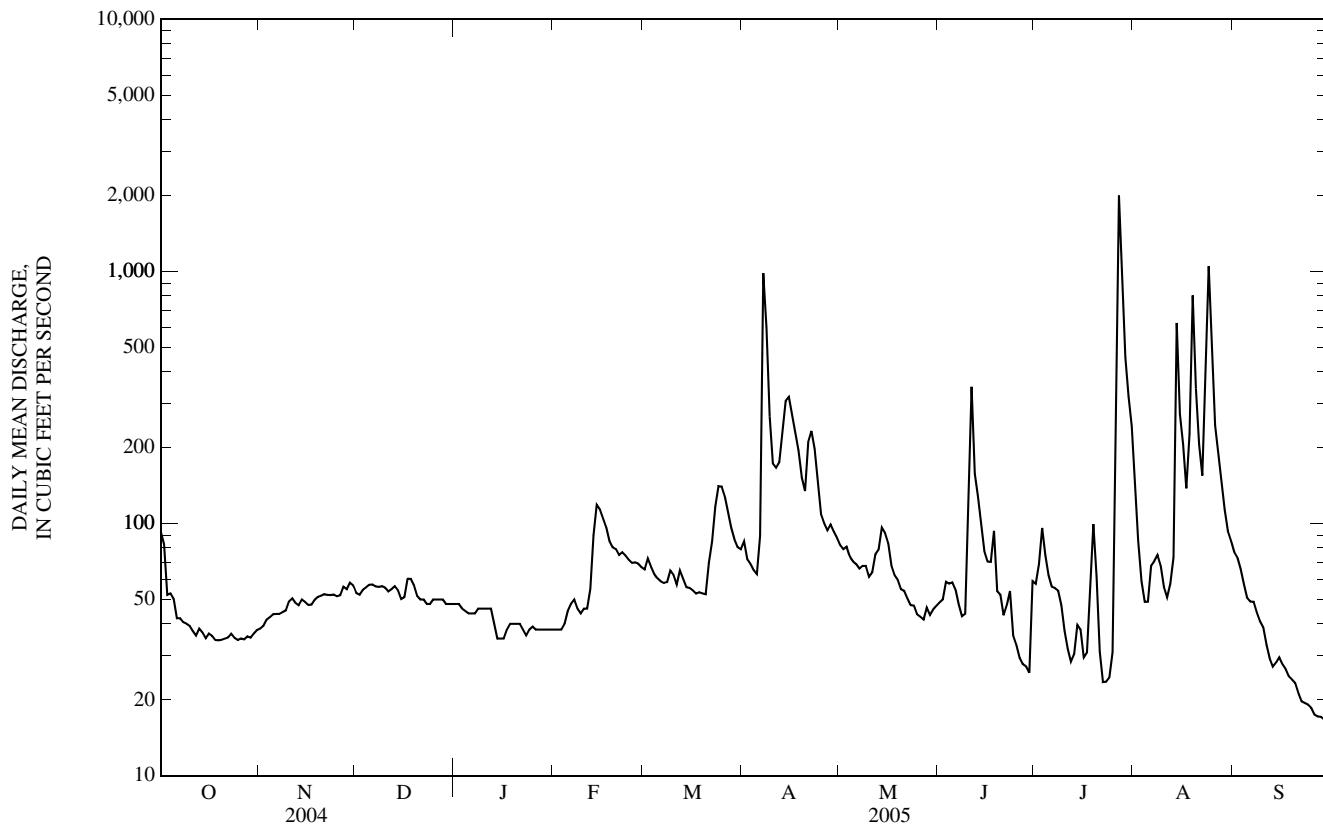
MEAN	511	344	272	266	444	679	663	822	1,162	1,157	606	614
(WY)	(1974)	(1947)	(1994)	(1903)	(1,354)	(2,766)	(4,009)	(3,458)	(8,464)	(10,740)	(3,521)	(4,143)
MAX	5,033	1,725	1,229	1,003	119	141	985	96	349	2,000	1,050	77
(WY)	(1992)	(1992)	(2001)	(1957)	(2005)	(1949)	(1993)	(1987)	(1949)	(1947)	(1993)	(1950)
MIN	14.5	34.0	26.7	37.8	59.9	75.1	75.9	49.5	70.7	42.6	52.2	23.9
(WY)	(1992)	(1992)	(2001)	(1957)	(2001)	(2005)	(1991)	(1991)	(1956)	(2005)	(1954)	(2002)

KANSAS RIVER BASIN

06856000 REPUBLICAN RIVER AT CONCORDIA, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR		WATER YEARS 1946 - 2005	
ANNUAL MEAN	183		90.3		625
HIGHEST ANNUAL MEAN				2,339	1951
LOWEST ANNUAL MEAN				90.3	2005
HIGHEST DAILY MEAN	2,900	Jul 10	2,000	Jul 27	55,200 Jun 25, 1947
LOWEST DAILY MEAN	17	Jan 26	16	Sep 30	7.0 Sep 9, 2003
ANNUAL SEVEN-DAY MINIMUM	18	Jan 26	17	Sep 24	8.9 Sep 6, 2002
MAXIMUM PEAK FLOW			2,610	Jul 27	75,000 Jun 25, 1947
MAXIMUM PEAK STAGE			9.01	Jul 27	16.95 Jun 24, 2003
INSTANTANEOUS LOW FLOW			15	Sep 30	4.6 Sep 10, 2003
ANNUAL RUNOFF (AC-FT)	133,000		65,400		452,800
10 PERCENT EXCEEDS	388		153		1,340
50 PERCENT EXCEEDS	96		53		274
90 PERCENT EXCEEDS	37		35		77

e Estimated



KANSAS RIVER BASIN

73

06856600 REPUBLICAN RIVER AT CLAY CENTER, KS

LOCATION.--Lat 39°21'20", long 97°07'38", in SW 1/4 NW 1/4 SW 1/4 sec.17, T.8 S., R.3 E., Clay County, Hydrologic Unit 10250017, on right bank at downstream side of bridge on Kansas Highway 15, 1.0 mi south of Clay Center, 4.0 mi downstream from Five Creeks, and at mile 38.2.

DRAINAGE AREA.--24,542 mi², of which about 7,500 mi² is noncontributing.

PERIOD OF RECORD.--June 1917 to current year. Monthly discharge only for some periods, published in WSP 1310. Prior to February 1934, published as "at Wakefield." Gage-height records collected in this vicinity August 1904 to October 1917 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 806: Drainage area. WSP 1006: 1941. WSP 1310: 1922. WSP 1340: 1929, 1933-34.

GAGE.--Water-stage recorder. Datum of gage is 1,159.21 ft above NGVD of 1929. See WSP 1919 for history of changes prior to Sept. 23, 1949. Sept. 23, 1949, to July 21, 1987, at site 200 ft downstream at same datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by irrigation development upstream from station and by reservoirs in Colorado, Nebraska, and Kansas. Flow moderately regulated since 1952 by Harlan County Lake (station 06849000). Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1895, 26.2 ft, June 21, 1915, site and datum then in use, from information by U.S. Weather Bureau. Flood of May 29, 1903, reached a stage of 24.8 ft, site and datum then in use, from information by U.S. Weather Bureau.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	48	67	e42	e36	103	117	173	100	153	269	138
2	49	49	68	e40	e38	99	114	163	107	125	228	123
3	58	49	66	e40	e45	97	112	157	133	107	176	114
4	90	50	64	e39	e48	99	104	151	243	95	129	100
5	73	49	67	e39	e56	98	98	148	272	94	100	93
6	62	52	71	e39	e59	92	176	145	177	90	83	84
7	65	54	72	e38	e60	90	4,230	138	128	75	68	80
8	62	53	71	e37	e52	86	1,700	141	99	66	57	77
9	57	52	70	e36	e49	85	1,200	187	100	57	60	72
10	54	56	69	e35	e56	85	638	148	5,770	53	57	68
11	54	60	69	e33	e56	84	445	133	2,950	51	52	63
12	54	60	67	e32	141	86	368	131	1,580	46	73	56
13	52	60	67	e31	374	82	388	130	1,500	46	328	52
14	50	59	64	e30	595	84	325	135	543	42	339	48
15	49	59	63	e27	330	86	350	146	348	35	369	49
16	e50	57	62	e26	232	81	365	137	250	31	313	45
17	e50	61	68	e26	191	79	357	129	202	31	263	42
18	e50	66	63	e28	170	76	321	122	171	43	192	40
19	51	67	e61	e31	154	74	289	113	147	44	165	37
20	50	64	e58	e31	136	73	264	104	148	47	158	36
21	50	63	e56	e31	127	82	599	99	128	49	394	34
22	48	62	e54	e32	123	148	621	94	115	53	276	33
23	48	63	e51	e34	118	234	464	89	104	31	201	34
24	48	62	e47	e36	116	170	363	87	95	21	171	32
25	48	61	e48	e37	112	176	300	82	93	19	597	31
26	51	62	e48	e36	108	194	247	81	84	45	1,130	31
27	50	68	e48	e36	106	193	215	77	77	40	530	30
28	48	67	e47	e36	105	179	198	78	74	639	349	31
29	49	70	e46	e36	---	158	189	82	62	1,150	244	30
30	48	70	e45	e36	---	142	182	97	93	602	194	29
31	48	---	e43	e36	---	127	---	95	---	377	162	---
MEAN	53.7	59.1	60.0	34.4	135	114	511	122	530	141	249	57.7
MAX	90	70	72	42	595	234	4,230	187	5,770	1,150	1,130	138
MIN	48	48	43	26	36	73	98	77	62	19	52	29
AC-FT	3,300	3,520	3,690	2,110	7,520	7,030	30,420	7,520	31,520	8,640	15,330	3,440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 2005, BY WATER YEAR (WY)

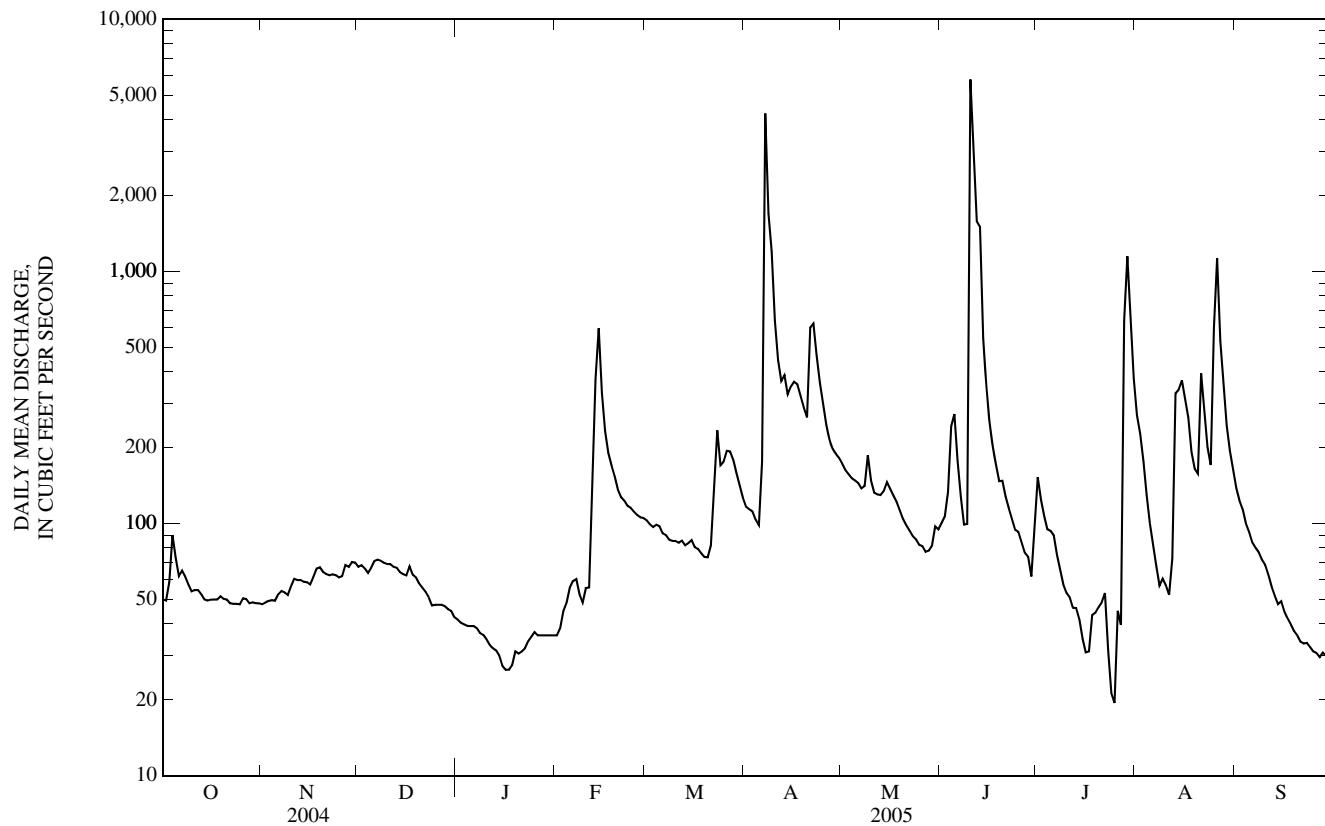
MEAN	644	457	378	378	644	943	1,020	1,362	2,080	1,613	893	919
(WY)	(1974)	(1947)	(1,583)	(1,615)	(2,688)	(4,795)	(5,797)	(7,170)	(11,320)	(21,590)	(4,594)	(4,920)
MIN	7.64	39.0	37.1	28.0	73.4	79.0	92.1	51.6	138	42.5	13.4	11.9
(WY)	(1992)	(1992)	(2001)	(1957)	(1992)	(1992)	(1954)	(1992)	(1988)	(1954)	(1934)	(2002)

KANSAS RIVER BASIN

06856600 REPUBLICAN RIVER AT CLAY CENTER, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1918 - 2005
ANNUAL MEAN	279	171	945
HIGHEST ANNUAL MEAN			3,724
LOWEST ANNUAL MEAN			171
HIGHEST DAILY MEAN	4,630	Mar 5	2005
LOWEST DAILY MEAN	22	Jan 30	Jun 3, 1935
ANNUAL SEVEN-DAY MINIMUM	28	Jan 28	Aug 9, 1934
MAXIMUM PEAK FLOW		5,770	1.0
MAXIMUM PEAK STAGE		19	1.9
INSTANTANEOUS LOW FLOW		Jan 13	Aug 7, 1934
ANNUAL RUNOFF (AC-FT)	202,800	8,190	195,000
10 PERCENT EXCEEDS	543	Jun 10	Jun 3, 1935
50 PERCENT EXCEEDS	150	15.19	25.74
90 PERCENT EXCEEDS	48	Jul 25	Jun 3, 1935
		19	0.00
		36	Aug 10, 1934

e Estimated



06857050 MILFORD LAKE NEAR JUNCTION CITY, KS

LOCATION.--Lat $39^{\circ}04'35''$, long $96^{\circ}53'58''$, in SE $\frac{1}{4}$ sec.20, T.11 S., R.5 E., Geary County, Hydrologic Unit 10250017, in control tower of dam on Republican River, 5.0 mi northwest of Junction City, and at mile 7.7.

DRAINAGE AREA.--24,880 mi², of which a large area is noncontributing.

PERIOD OF RECORD.--December 1966 to current year. Prior to October 1971, published as "Milford Reservoir."

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Army Corps of Engineers).

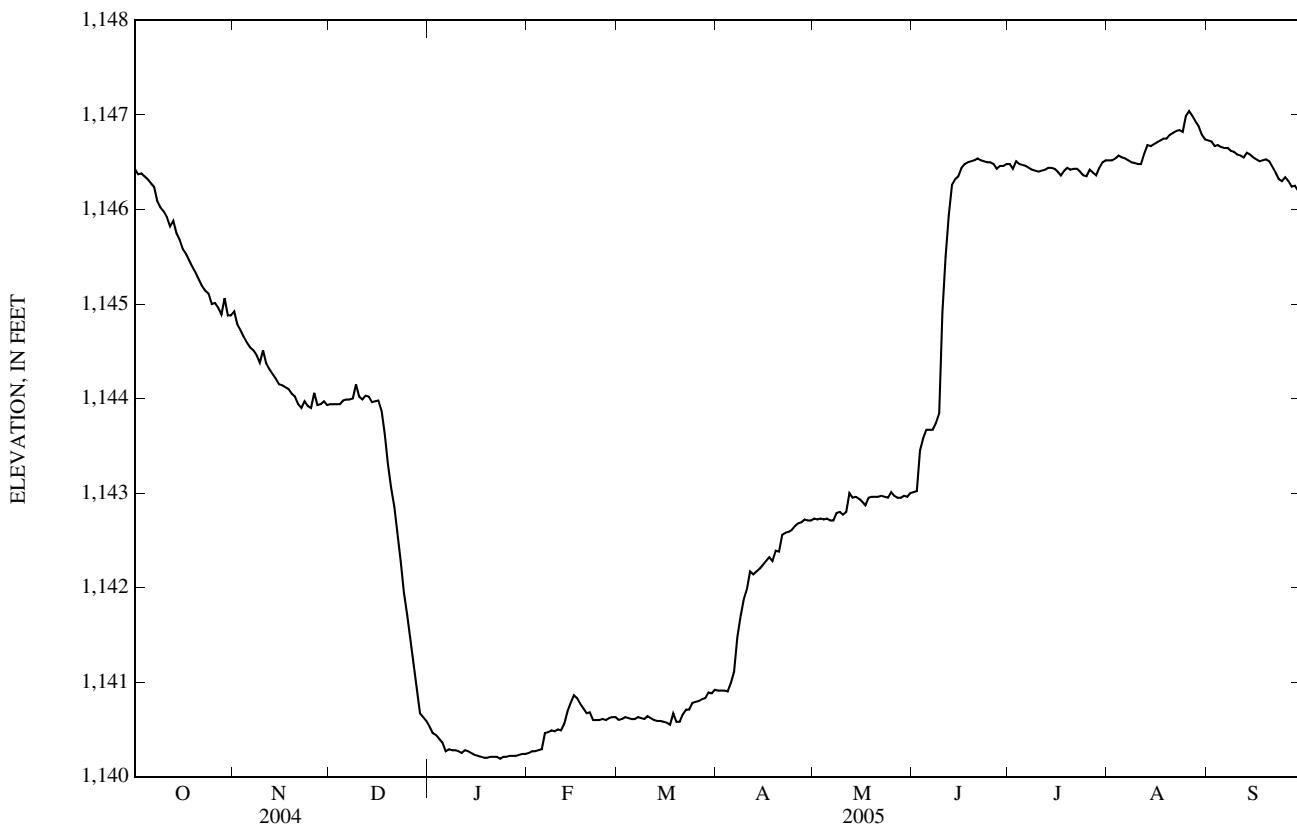
REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Jan. 16, 1967. Conservation pool elevation was reached July 15, 1967. Total capacity, 1,380,000 acre-ft below elevation 1,182.0 ft. Crest of uncontrolled spillway is at elevation 1,176.2 ft. Storage capacity of 673,600 acre-ft above elevation 1,144.4 ft is provided for flood control. Storage capacity of 415,400 acre-ft below elevation 1,144.4 ft is provided for conservation and recreation. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,181.94 ft, July 25, 1993, contents, 1,346,000 acre-ft; minimum elevation since conservation pool first filled, 1,136.90 ft, Jan. 27, 2003, contents, 283,100 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,147.12 ft, Aug. 26, contents, 433,800 acre-ft; minimum elevation, 1,140.17 ft, Jan. 18, contents, 326,800 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Computed by U.S. Army Corps of Engineers in 1982 from topographic maps)

Elevation	Contents	Elevation	Contents	Elevation	Contents
1,140	324,400	1,145	398,400	1,150	485,500



KANSAS RIVER BASIN

06857050 MILFORD LAKE NEAR JUNCTION CITY, KS—Continued

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,146.43	1,144.92	1,143.94	1,140.53	1,140.25	1,140.60	1,140.91	1,142.73	1,143.01	1,146.48	1,146.52	1,146.73
2	1,146.37	1,144.78	1,143.94	e1,140.46	1,140.27	1,140.61	1,140.91	1,142.72	1,143.02	1,146.43	1,146.52	1,146.72
3	1,146.38	1,144.72	1,143.94	e1,140.44	1,140.27	1,140.63	1,140.91	1,142.73	1,143.45	1,146.51	1,146.54	1,146.67
4	1,146.35	1,144.65	1,143.94	e1,140.40	1,140.28	1,140.62	1,140.90	1,142.72	1,143.58	1,146.48	1,146.57	1,146.68
5	1,146.32	1,144.59	1,143.98	1,140.36	1,140.29	1,140.61	1,140.99	1,142.73	1,143.67	1,146.47	1,146.55	1,146.66
6	1,146.28	1,144.54	1,143.99	1,140.27	1,140.46	1,140.61	1,141.11	1,142.71	1,143.67	1,146.46	1,146.54	1,146.65
7	1,146.24	1,144.51	1,143.99	1,140.29	1,140.47	1,140.63	1,141.47	1,142.71	1,143.67	1,146.44	1,146.52	1,146.65
8	1,146.09	1,144.46	1,144.00	1,140.28	1,140.49	1,140.62	1,141.69	1,142.79	1,143.74	1,146.42	1,146.50	1,146.62
9	1,146.02	1,144.38	1,144.15	1,140.28	1,140.48	1,140.61	1,141.87	1,142.80	1,143.84	1,146.41	1,146.49	1,146.61
10	1,145.98	1,144.51	1,144.02	1,140.27	1,140.50	1,140.64	1,141.98	1,142.77	1,144.91	1,146.40	1,146.48	1,146.58
11	1,145.92	1,144.37	1,143.99	1,140.25	1,140.49	1,140.62	1,142.17	1,142.80	1,145.50	1,146.41	1,146.48	1,146.57
12	1,145.82	1,144.31	1,144.03	1,140.28	1,140.56	1,140.60	1,142.14	1,143.00	1,145.94	1,146.42	1,146.59	1,146.55
13	1,145.88	1,144.26	1,144.02	1,140.27	1,140.69	1,140.59	1,142.17	1,142.95	1,146.26	1,146.44	1,146.68	1,146.60
14	1,145.75	1,144.21	1,143.96	1,140.25	1,140.78	1,140.59	1,142.20	1,142.96	1,146.32	1,146.44	1,146.67	1,146.58
15	1,145.68	1,144.15	1,143.97	1,140.23	1,140.86	1,140.58	1,142.24	1,142.94	1,146.35	1,146.43	1,146.69	1,146.55
16	1,145.58	1,144.14	1,143.98	1,140.22	1,140.83	1,140.57	1,142.28	1,142.91	1,146.44	1,146.40	1,146.71	1,146.53
17	1,145.53	1,144.12	1,143.87	1,140.21	1,140.77	1,140.55	1,142.32	1,142.87	1,146.48	1,146.36	1,146.73	1,146.51
18	1,145.46	1,144.10	1,143.62	1,140.20	1,140.72	1,140.67	1,142.28	1,142.95	1,146.50	1,146.41	1,146.75	1,146.52
19	1,145.39	1,144.05	1,143.30	1,140.20	1,140.67	1,140.58	1,142.39	1,142.96	1,146.51	1,146.44	1,146.75	1,146.53
20	1,145.33	1,144.02	1,143.05	1,140.21	1,140.68	1,140.58	1,142.38	1,142.96	1,146.52	1,146.42	1,146.79	1,146.51
21	1,145.26	1,143.94	1,142.85	1,140.21	1,140.60	1,140.66	1,142.56	1,142.96	1,146.54	1,146.43	1,146.81	1,146.45
22	1,145.19	1,143.90	1,142.55	1,140.21	1,140.71	1,140.71	1,142.58	1,142.97	1,146.52	1,146.43	1,146.83	1,146.39
23	1,145.14	1,143.97	1,142.27	1,140.19	1,140.60	1,140.71	1,142.59	1,142.96	1,146.51	1,146.40	1,146.84	1,146.32
24	1,145.11	1,143.92	1,141.94	1,140.21	1,140.61	1,140.78	1,142.61	1,142.95	1,146.50	1,146.36	1,146.82	1,146.30
25	1,145.00	1,143.90	1,141.71	1,140.21	1,140.60	1,140.79	1,142.65	1,143.01	1,146.50	1,146.35	1,146.99	1,146.34
26	1,145.01	1,144.06	1,141.44	1,140.22	1,140.62	1,140.80	1,142.68	1,142.97	1,146.48	1,146.42	1,147.04	1,146.30
27	1,144.96	1,143.93	1,141.16	1,140.22	1,140.63	1,140.82	1,142.69	1,142.95	1,146.43	1,146.39	1,146.99	1,146.24
28	1,144.89	1,143.94	1,140.90	1,140.22	1,140.63	1,140.83	1,142.72	1,142.95	1,146.46	1,146.36	1,146.93	1,146.25
29	1,145.06	1,143.97	1,140.67	1,140.23	---	1,140.89	1,142.71	1,142.97	1,146.46	1,146.44	1,146.88	1,146.20
30	1,144.88	1,143.93	1,140.63	1,140.24	---	1,140.88	1,142.71	1,142.96	1,146.48	1,146.50	1,146.79	1,146.19
31	1,144.88	---	1,140.59	1,140.24	---	1,140.92	---	1,143.00	---	1,146.52	1,146.74	---
MEAN	1,145.62	1,144.24	1,143.05	1,140.27	1,140.56	1,140.67	1,142.06	1,142.88	1,145.47	1,146.43	1,146.70	1,146.50
MAX	1,146.43	1,144.92	1,144.15	1,140.53	1,140.86	1,140.92	1,142.72	1,143.01	1,146.54	1,146.52	1,147.04	1,146.73
MIN	1,144.88	1,143.90	1,140.59	1,140.19	1,140.25	1,140.55	1,140.90	1,142.71	1,143.01	1,146.35	1,146.48	1,146.19
(+)	392,100	381,500	332,700	327,800	333,200	337,300	363,100	367,400	422,900	423,600	427,300	418,000
(#)	-29,100	-10,100	-48,800	-4,900	+5,400	+4,100	+25,800	+4,300	+55,500	+700	+3,700	-9,300

CAL YR 2004 (#) -45,000

WTR YR 2005 (#) -3,200

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

e Estimated

KANSAS RIVER BASIN

77

06857100 REPUBLICAN RIVER BELOW MILFORD DAM, KS

LOCATION.--Lat 39°02'53", long 96°50'09", Geary County, Hydrologic Unit 10250017, Fort Riley Military Reservation, on right bank at downstream side of bridge on U.S. Highway 77, 1.7 mi downstream from Milford Dam, 2.5 mi northwest of Junction City, and at mile 6.0.

DRAINAGE AREA.--24,890 mi², of which a large area is noncontributing.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,045.70 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 20, 1997, at datum 6.8 ft higher. Gage temporarily moved on Nov. 20, 1997, 2.2 mi downstream during replacement of U.S. Highway 77 bridge.

REMARKS.--Records fair. Flow completely regulated since 1967 by Milford Lake (station 06857050), 1.7 mi upstream. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	209	26	579	63	78	29	27	27	35	37	123
2	32	457	27	571	62	78	28	28	26	34	37	105
3	33	465	27	572	62	77	27	28	e100	34	36	97
4	32	463	26	566	62	75	27	27	e80	34	41	91
5	34	433	27	561	61	75	27	26	e66	33	34	88
6	160	370	25	388	71	75	38	26	e54	33	34	66
7	451	368	28	155	64	73	27	26	e47	33	35	29
8	516	365	36	134	72	74	27	26	32	34	35	27
9	525	366	36	124	e70	73	27	26	33	33	35	25
10	524	372	35	117	e70	58	30	25	89	33	34	24
11	520	363	33	102	63	67	28	25	145	34	34	24
12	516	362	33	85	66	67	27	38	64	34	35	24
13	510	362	33	82	69	68	27	27	109	34	41	23
14	507	362	33	e88	63	69	27	24	48	34	35	30
15	505	363	30	e88	62	60	27	24	42	34	35	33
16	504	363	29	e86	269	33	27	24	42	34	35	31
17	505	379	628	75	506	31	27	24	40	34	36	31
18	501	456	2,350	76	505	30	27	25	40	35	36	31
19	505	455	2,330	72	502	29	27	24	39	60	64	30
20	509	454	2,320	71	495	30	27	24	39	37	96	30
21	506	454	2,300	70	493	35	26	24	39	36	94	30
22	502	310	2,280	71	305	32	26	24	38	37	99	806
23	500	35	2,250	e76	97	31	26	25	38	37	101	1,540
24	500	29	2,230	67	89	31	27	25	37	37	99	53
25	477	27	2,220	66	85	31	27	26	36	37	561	37
26	439	26	2,210	66	82	31	27	25	36	42	1,100	33
27	432	26	2,190	68	80	30	27	26	35	37	1,100	31
28	433	26	2,180	67	79	30	27	26	38	37	1,130	31
29	306	27	1,880	66	---	30	27	27	35	36	1,120	27
30	43	27	894	66	---	30	27	27	35	36	1,100	31
31	37	---	591	64	---	30	29	---	37	787	---	
MEAN	374	292	946	172	163	50.4	27.5	26.1	51.0	36.0	261	119
MAX	525	465	2,350	579	506	78	38	38	145	60	1,130	1,540
MIN	32	26	25	64	61	29	26	24	26	33	34	23
AC-FT	23,000	17,400	58,190	10,590	9,060	3,100	1,640	1,600	3,030	2,210	16,060	7,100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2005, BY WATER YEAR (WY)

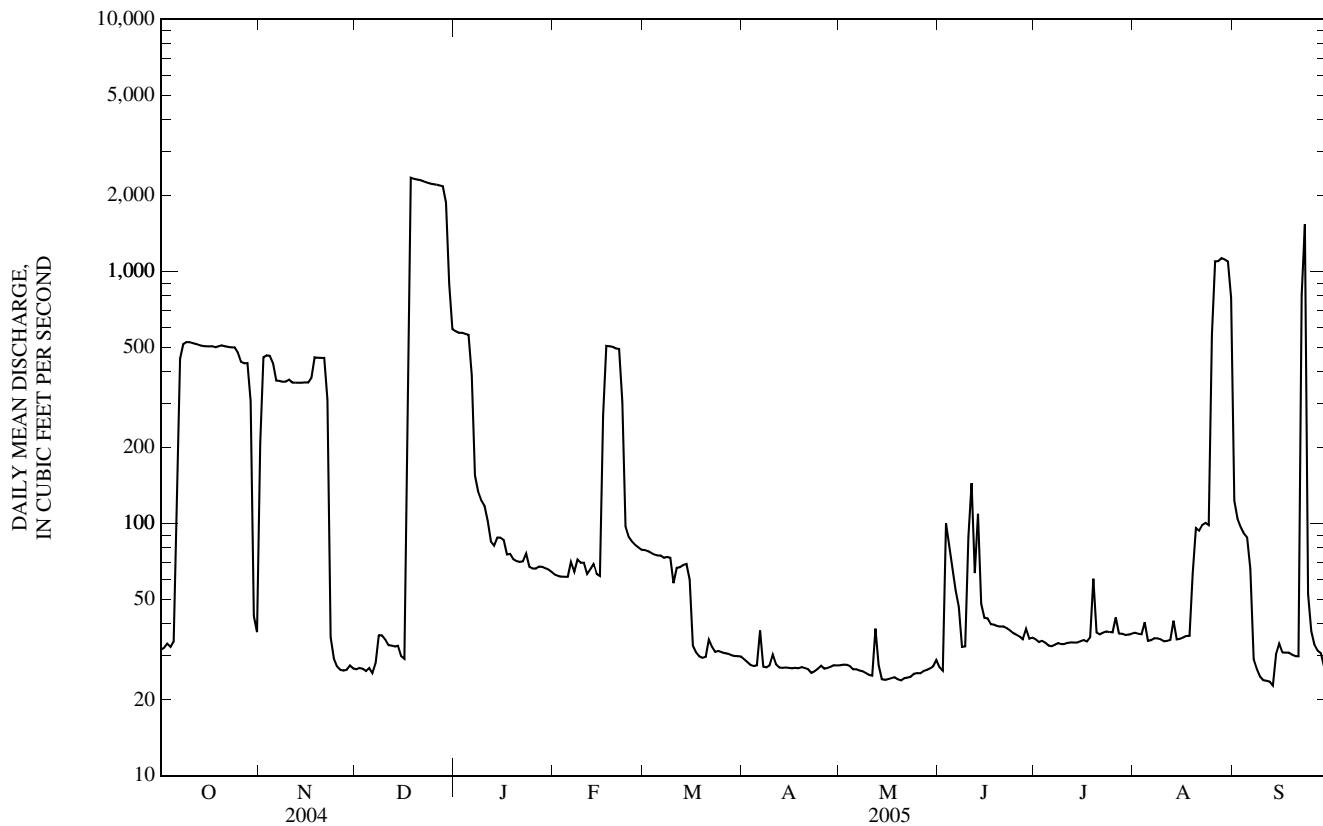
MEAN	758	689	770	377	565	841	946	1,204	1,160	1,358	1,102	696
MAX	5,272	7,732	2,315	1,492	2,617	3,324	6,071	8,283	7,770	9,746	15,420	7,785
(WY)	(1974)	(1974)	(1974)	(1974)	(1974)	(1973)	(1987)	(1987)	(1995)	(1993)	(1993)	(1993)
MIN	30.2	20.3	9.63	43.8	15.1	22.0	27.5	26.1	30.3	27.7	101	28.4
(WY)	(1996)	(1995)	(1995)	(1997)	(1997)	(2003)	(2005)	(2005)	(2003)	(2003)	(2000)	(2004)

KANSAS RIVER BASIN

06857100 REPUBLICAN RIVER BELOW MILFORD DAM, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR		WATER YEARS 1968 - 2005
ANNUAL MEAN	368	211	874	4,027 1993
HIGHEST ANNUAL MEAN			81.9	81.9 2003
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	3,880	Jul 19	2,350	33,300 Jul 26, 1993
LOWEST DAILY MEAN	17	Aug 23	23	3.2 Sep 18, 1985
ANNUAL SEVEN-DAY MINIMUM	19	Aug 18	24	8.9 Jan 21, 1997
MAXIMUM PEAK FLOW			2,580	33,700 Jul 26, 1993
MAXIMUM PEAK STAGE			8.18	22.10 Jun 22, 1964
INSTANTANEOUS LOW FLOW			19	2.7 Sep 18, 1985
ANNUAL RUNOFF (AC-FT)	267,500		153,000	633,500
10 PERCENT EXCEEDS	594		508	2,200
50 PERCENT EXCEEDS	113		38	302
90 PERCENT EXCEEDS	26		26	40

e Estimated



KANSAS RIVER BASIN

79

06860000 SMOKY HILL RIVER AT ELKADER, KS

LOCATION.--Lat 38°47'41", long 100°51'29", in NE $\frac{1}{4}$ sec.34, T.14 S., R.32 W., Logan County, Hydrologic Unit 10260003, on right bank at downstream side of bridge on U.S. Highway 83, 22.3 mi south of Oakley, 0.1 mi downstream from Ladder Creek, and at mile 409.9.

DRAINAGE AREA.--3,555 mi².

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1310: 1941(M), 1947(M), 1949(M). WSP 1510: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,622.62 ft above NGVD of 1929. Prior to Oct. 1, 1986, water-stage recorder at site 100 ft downstream and at datum 2.00 ft higher and Oct. 1, 1986, to Sept. 30, 1995, water-stage recorder at site 100 ft downstream at same datum.

REMARKS.--Records poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1937, 15.2 ft, May 30, 1938, from floodmark, discharge, 71,000 ft³/s, on basis of slope-area measurement of peak flow, present datum.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 22	1100	*18	*5.15				No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.55	0.97	1.2	1.5	0.35	0.10	0.00	0.00	0.00
2	0.00	0.00	0.00	0.61	0.96	0.83	1.6	0.39	0.11	0.00	0.00	0.00
3	0.00	0.00	0.00	0.60	0.93	0.94	1.5	0.44	0.19	0.00	0.00	0.00
4	0.00	0.00	0.00	0.61	0.96	1.00	1.5	0.62	0.21	0.00	0.00	0.00
5	0.00	0.00	0.00	0.43	1.0	0.77	1.9	0.53	0.09	0.00	0.00	0.00
6	0.00	0.00	0.00	0.21	1.6	0.77	7.1	0.58	0.04	0.00	0.00	0.03
7	0.00	0.00	0.00	0.16	2.8	1.00	6.3	0.76	0.05	0.00	0.00	13
8	0.00	0.00	0.00	0.09	2.1	1.2	4.2	0.62	0.02	0.00	0.00	4.9
9	0.00	0.00	0.00	0.29	1.6	0.87	3.4	0.76	0.00	0.00	0.00	0.76
10	0.00	0.00	0.00	1.0	1.5	0.80	4.1	0.72	0.00	0.00	0.00	0.18
11	0.00	0.00	0.00	1.2	1.6	0.56	2.1	0.44	0.00	0.00	0.00	0.08
12	0.00	0.00	0.00	e1.0	1.7	0.87	1.4	0.54	0.01	0.00	0.00	0.05
13	0.00	0.00	0.00	0.92	1.7	0.65	1.1	0.62	0.02	0.00	0.00	0.03
14	0.00	0.00	0.00	0.63	1.6	0.60	0.93	1.1	0.00	0.00	0.00	0.02
15	0.00	0.00	0.00	0.43	1.4	0.65	0.76	0.62	0.00	0.00	0.00	0.04
16	0.00	0.00	0.00	0.31	1.4	0.93	1.3	0.34	0.00	0.00	0.00	0.02
17	0.00	0.00	0.00	0.37	1.2	0.74	1.6	0.22	0.26	0.00	0.00	0.01
18	0.00	0.00	0.00	0.59	1.1	0.87	0.90	0.13	1.7	0.00	0.00	0.01
19	0.00	0.00	0.00	1.1	1.3	1.1	0.62	0.09	0.50	0.00	0.00	0.01
20	0.00	0.00	0.00	1.6	1.6	1.0	1.0	0.07	0.17	0.00	0.00	0.00
21	0.00	0.00	e0.00	2.0	1.6	1.1	0.63	0.15	5.5	0.00	0.00	0.00
22	0.00	0.00	e0.00	1.9	1.0	2.6	0.47	0.12	13	0.00	0.00	0.00
23	0.00	0.00	e0.00	1.4	0.89	2.4	0.42	0.06	7.4	0.00	0.00	0.00
24	0.00	0.00	e0.00	1.3	1.0	2.6	0.33	0.05	2.1	0.00	0.02	0.00
25	0.00	0.00	e0.00	1.2	0.94	3.0	0.28	0.05	0.83	0.00	0.04	0.00
26	0.00	0.00	e0.00	1.3	1.1	2.0	0.29	0.03	0.39	1.9	0.00	0.00
27	0.00	0.00	e0.00	1.1	1.1	1.5	0.26	0.02	0.18	8.2	0.00	0.00
28	0.00	0.00	e0.10	1.1	1.2	1.4	0.30	0.01	0.10	2.7	0.00	0.00
29	0.00	e0.00	0.32	1.2	---	1.5	0.41	0.01	0.04	0.20	0.00	0.00
30	0.00	e0.00	0.36	1.4	---	1.9	0.36	0.02	0.01	0.00	0.00	0.00
31	0.00	---	0.54	0.98	---	1.9	---	0.08	---	0.00	0.00	---
MEAN	0.00	0.00	0.04	0.89	1.35	1.27	1.62	0.34	1.10	0.42	0.00	0.64
MAX	0.00	0.00	0.54	2.0	2.8	3.0	7.1	1.1	13	8.2	0.04	13
MIN	0.00	0.00	0.00	0.09	0.89	0.56	0.26	0.01	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	2.6	55	75	78	96	21	65	26	0.1	38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2005, BY WATER YEAR (WY)

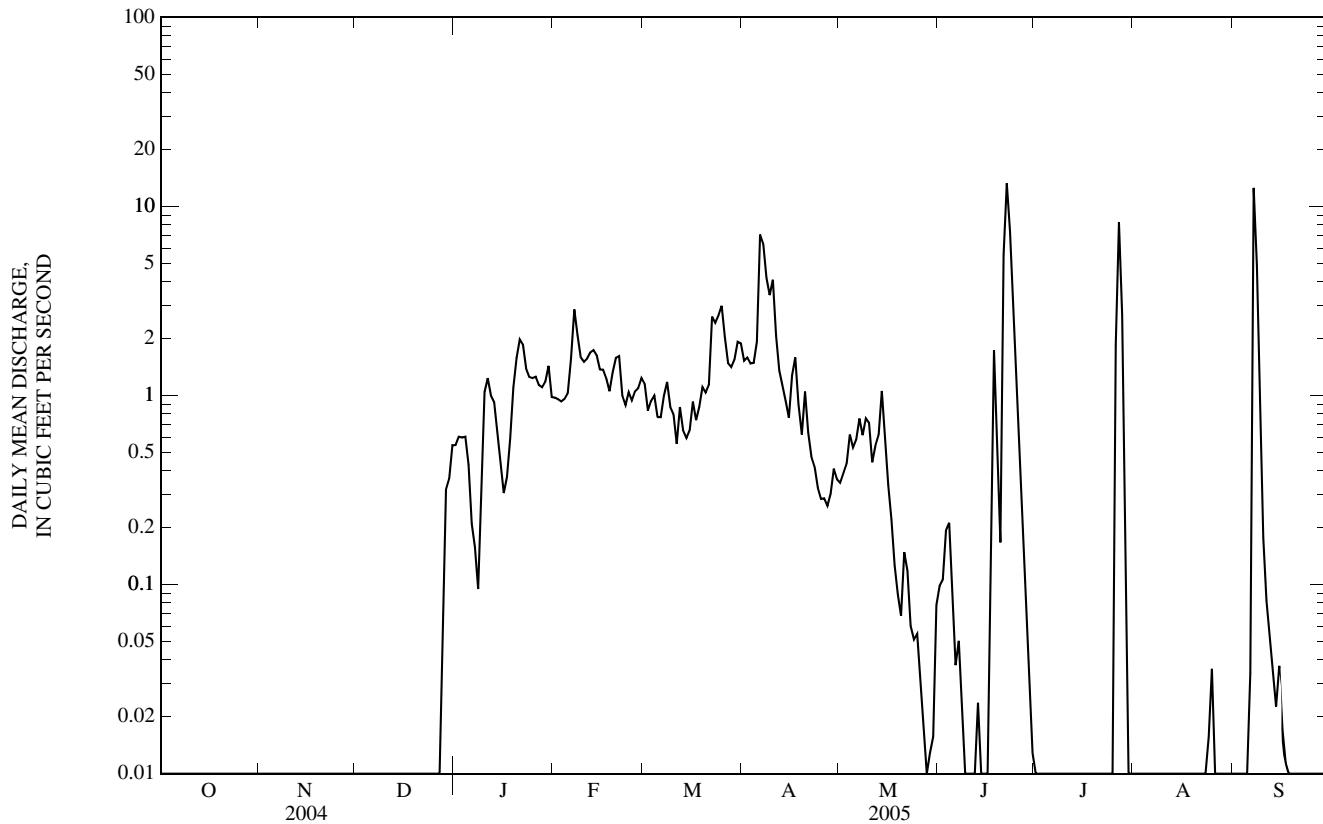
MEAN	13.7	3.32	3.10	3.54	5.17	8.42	9.04	26.3	82.2	64.9	32.9	12.5
(WY)	(1947)	(1952)	(1952)	(1952)	(1942)	(1960)	(1942)	(1942)	(2,410)	(992)	(580)	(158)
MAX	624	34.3	25.6	30.1	25.4	158	111	387	(2,410)	(957)	(1951)	(1949)
(WY)	(1940)	(1940)	(1940)	(1940)	(1986)	(1986)	(1986)	(1986)	(1986)	(1957)	(1950)	(1943)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1940)	(1940)	(1940)	(1940)	(1986)	(1986)	(1986)	(1986)	(1986)	(1954)	(1970)	(1943)

KANSAS RIVER BASIN

06860000 SMOKY HILL RIVER AT ELKADER, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1940 - 2005
ANNUAL MEAN	0.75	0.63	22.2
HIGHEST ANNUAL MEAN			290
LOWEST ANNUAL MEAN			0.00
HIGHEST DAILY MEAN	53	Jun 20	13,700
LOWEST DAILY MEAN	0.00	Jan 1	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00
MAXIMUM PEAK FLOW		18	22,300
MAXIMUM PEAK STAGE		5.15	11.02
INSTANTANEOUS LOW FLOW		0.00	0.00
ANNUAL RUNOFF (AC-FT)	542	457	16,060
10 PERCENT EXCEEDS	0.41	1.6	20
50 PERCENT EXCEEDS	0.00	0.03	1.2
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated



KANSAS RIVER BASIN

81

06861000 SMOKY HILL RIVER NEAR ARNOLD, KS

LOCATION.--Lat 38°48'28", long 100°01'20", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.29, T.14 S., R.24 W., Trego County, Hydrologic Unit 10260003, on left bank near downstream side of county highway bridge, 7.0 mi upstream from headwaters of Cedar Bluff Reservoir, 12 mi north of Arnold, and at mile 356.2.

DRAINAGE AREA.--5,220 mi², approximately.

PERIOD OF RECORD.--February 1950 to current year. Prior to October 1950, published as "near Ransom."

GAGE.--Water-stage recorder. Datum of gage is 2,196.13 ft above NGVD of 1929. See WSP 1919 for history of changes prior to Sept. 30, 1961.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 30, 1938, reached a stage of about 19 ft, present site and datum, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 16	1300	*122	*2.73				No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.43	0.11	0.26	0.54	0.73	0.55	1.1	1.1	0.12	0.01	0.07	0.03
2	0.40	0.09	0.29	0.47	0.70	0.55	1.1	1.1	0.09	0.01	0.05	0.02
3	0.42	0.10	0.32	e0.44	0.62	0.53	1.1	1.0	0.30	0.01	0.03	0.03
4	0.45	0.13	0.36	e0.43	0.60	0.54	1.1	1.1	4.6	3.6	0.04	0.03
5	0.36	0.10	0.44	e0.44	0.60	0.54	1.1	1.0	8.2	21	0.04	0.04
6	0.55	0.08	0.45	e0.45	1.9	0.52	1.4	1.0	2.1	20	0.05	0.03
7	0.63	0.04	0.40	e0.45	1.9	0.51	1.2	0.99	0.45	5.0	0.06	0.03
8	0.39	0.03	0.40	e0.45	1.6	0.50	1.2	0.87	0.14	0.88	0.06	2.7
9	0.29	0.04	0.41	e0.43	1.1	0.48	1.1	0.81	0.10	0.22	0.07	0.27
10	0.31	0.05	0.38	e0.39	1.0	0.48	1.2	0.80	0.10	0.08	0.08	0.05
11	0.47	0.14	0.35	e0.37	0.99	0.47	1.2	0.69	2.4	0.05	0.07	0.04
12	0.36	0.01	0.36	e0.37	0.92	0.46	1.2	0.63	0.86	0.02	0.12	0.03
13	0.30	0.04	0.30	e0.36	1.2	0.46	1.1	0.59	0.26	0.01	0.07	0.03
14	0.22	0.05	0.28	e0.36	0.96	0.48	1.0	0.53	0.12	0.00	0.05	0.04
15	0.26	0.03	0.29	e0.35	0.82	0.48	0.98	0.48	0.12	0.01	0.05	0.05
16	0.26	0.04	0.34	e0.34	0.74	0.50	0.95	0.51	61	0.01	0.06	5.4
17	0.19	0.02	0.36	e0.35	0.64	0.52	0.94	0.55	26	0.02	0.06	2.9
18	0.19	0.11	0.40	0.36	0.63	0.53	0.96	0.43	7.0	0.03	0.07	0.26
19	0.19	0.03	0.39	0.56	0.68	0.48	0.95	0.34	2.7	11	0.07	0.06
20	0.17	0.01	0.42	0.86	0.70	0.50	0.91	0.31	1.3	10	0.06	0.04
21	0.14	0.08	0.41	1.1	0.68	1.3	0.87	0.29	1.3	3.1	0.06	0.03
22	0.14	0.10	0.40	1.0	0.62	28	0.79	0.21	5.0	0.37	0.06	0.02
23	0.07	0.09	0.35	0.80	0.60	16	0.76	0.19	4.2	0.12	7.5	0.02
24	0.08	0.11	0.26	0.86	0.60	8.1	0.79	0.28	1.5	0.05	17	0.02
25	0.08	0.13	0.34	0.93	0.61	4.5	0.91	1.7	0.50	0.11	5.8	0.02
26	0.14	0.18	0.39	0.94	0.61	3.3	0.95	5.6	0.24	15	3.0	0.02
27	0.11	0.19	0.40	0.84	0.62	2.5	0.96	2.3	0.08	14	0.39	0.03
28	0.17	0.20	0.46	0.84	0.60	1.9	0.97	0.41	0.03	2.9	0.08	0.04
29	0.09	e0.21	0.63	0.82	---	1.5	1.1	0.14	0.01	0.70	0.04	0.03
30	0.08	0.25	0.68	0.77	---	1.4	1.1	0.09	0.01	0.22	0.03	0.03
31	0.05	---	0.59	0.77	---	1.2	---	0.13	---	0.09	0.04	---
MEAN	0.26	0.09	0.39	0.59	0.86	2.57	1.03	0.84	4.36	3.50	1.14	0.41
MAX	0.63	0.25	0.68	1.1	1.9	28	1.4	5.6	61	21	17	5.4
MIN	0.05	0.01	0.26	0.34	0.60	0.46	0.76	0.09	0.01	0.00	0.03	0.02
AC-FT	16	5.5	24	37	48	158	61	52	260	215	70	24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2005, BY WATER YEAR (WY)

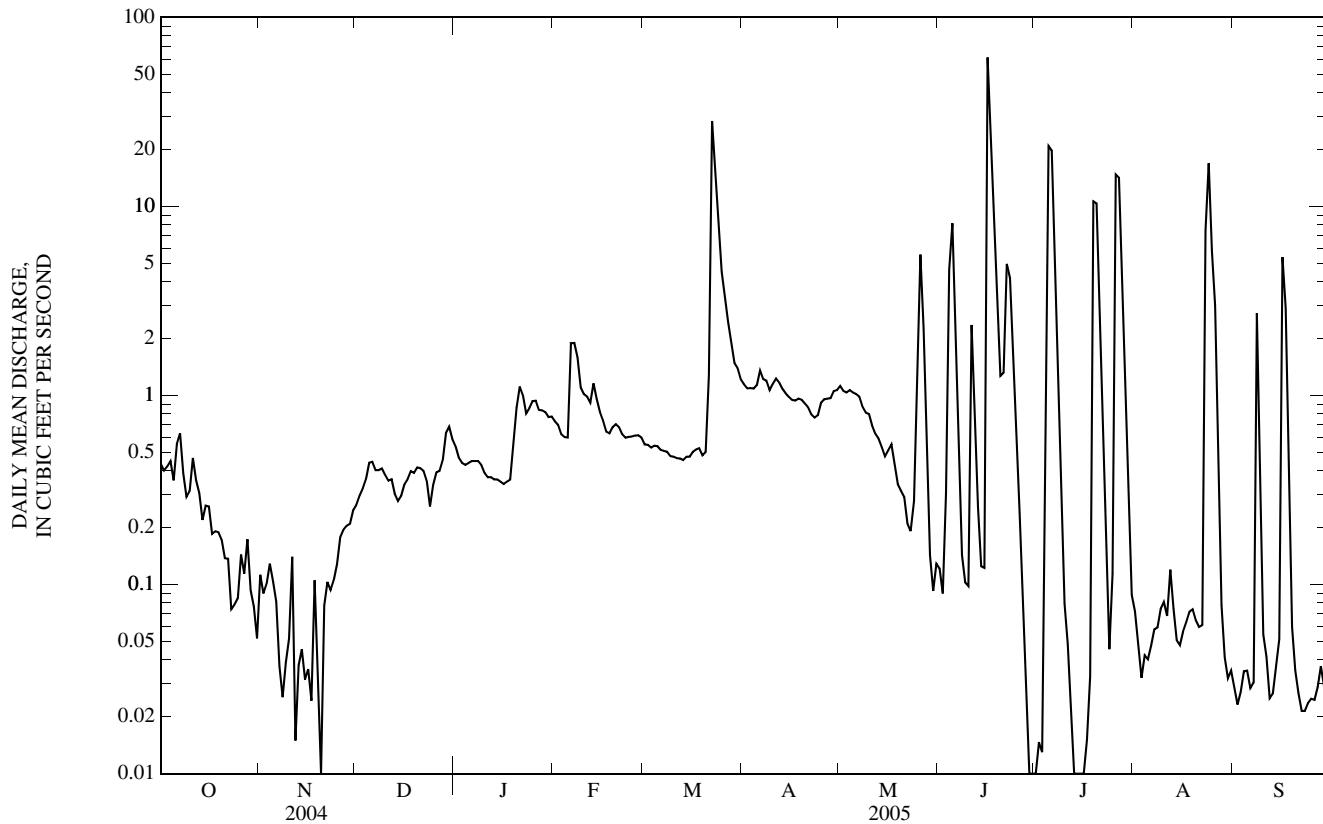
MEAN	16.1	7.10	5.59	6.02	9.75	20.7	16.1	63.3	166	94.1	50.1	30.2
MAX	317	55.0	42.5	57.4	99.2	584	116	934	4,331	965	452	353
(WY)	(1966)	(1997)	(1951)	(1952)	(1966)	(1960)	(1958)	(1957)	(1951)	(1951)	(1960)	(1957)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.01	0.05	0.06	0.03
(WY)	(1989)	(1990)	(1989)	(1989)	(1989)	(1989)	(1989)	(1968)	(1985)	(1988)	(1978)	(1956)

KANSAS RIVER BASIN

06861000 SMOKY HILL RIVER NEAR ARNOLD, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1951 - 2005
ANNUAL MEAN	3.37	1.34	40.5
HIGHEST ANNUAL MEAN			550
LOWEST ANNUAL MEAN			0.33
HIGHEST DAILY MEAN	351	Jun 20	14,200
LOWEST DAILY MEAN	0.00	Aug 26	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 3	0.01
MAXIMUM PEAK FLOW			23,800
MAXIMUM PEAK STAGE			12.57
INSTANTANEOUS LOW FLOW			0.00
ANNUAL RUNOFF (AC-FT)	2,440	970	29,310
10 PERCENT EXCEEDS	1.8	1.9	44
50 PERCENT EXCEEDS	0.33	0.41	2.0
90 PERCENT EXCEEDS	0.04	0.03	0.02

e Estimated



06861500 CEDAR BLUFF RESERVOIR NEAR ELLIS, KS

LOCATION.--Lat $38^{\circ}47'21''$, long $99^{\circ}43'13''$, in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.36, T.14 S., R.22 W., Trego County, Hydrologic Unit 10260003, in control house structure of outlet works conduit at dam on Smoky Hill River, 18 mi southwest of Ellis, and at mile 333.7.

DRAINAGE AREA.--5,530 mi², approximately.

PERIOD OF RECORD.--November 1950 to current year (monthly records only prior to August 1960).

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by Bureau of Reclamation). Prior to Aug. 20, 1960, nonrecording mercury-column gage at same site and datum.

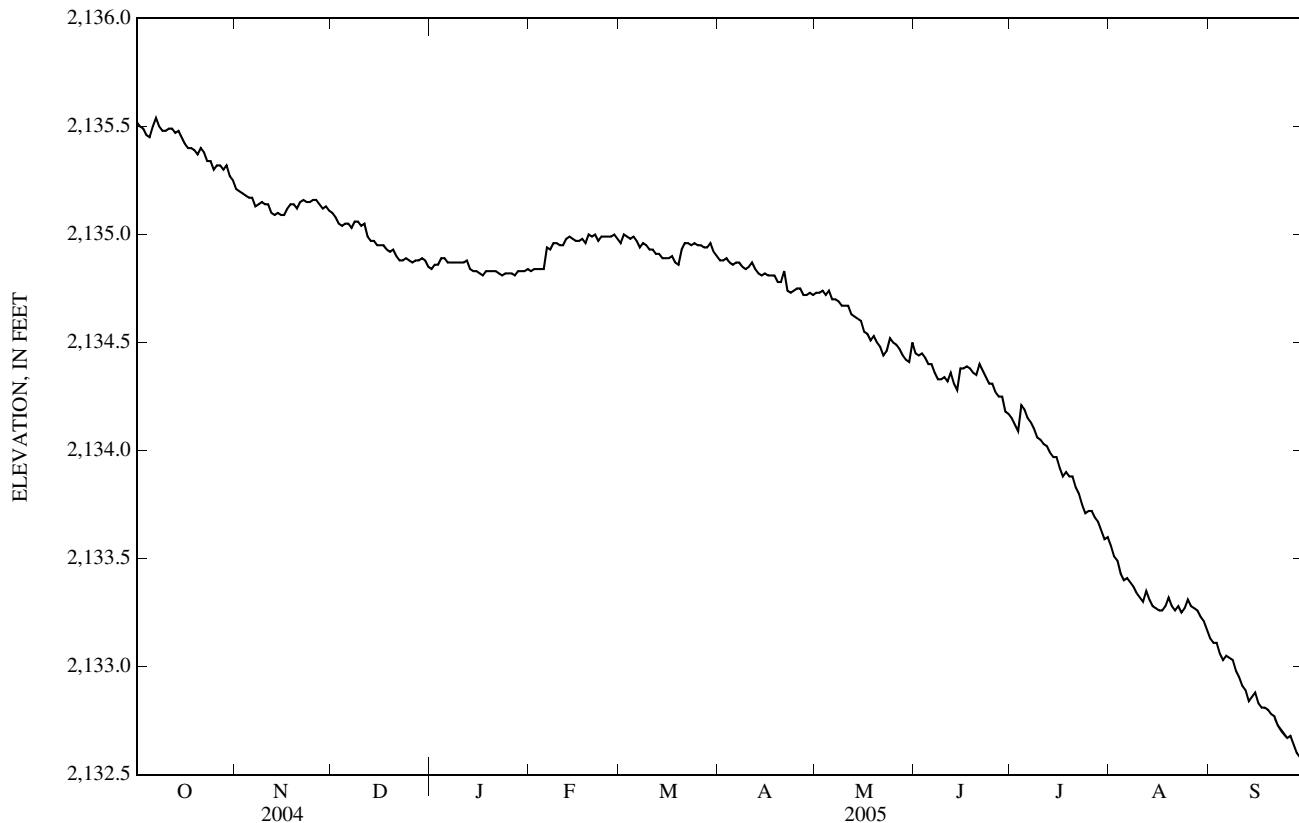
REMARKS.--Records fair. Reservoir is formed by compacted earthfill dam. Storage began Nov. 13, 1950. Dam was completed in 1951. Total capacity, 870,400 acre-ft, consisting of the following: Dead storage, 8,260 acre-ft below elevation 2,090 ft, sill of trashrack structure; irrigation pool, 176,800 acre-ft between elevations 2,090 ft and 2,144 ft; flood-control pool, 191,900 acre-ft between elevations 2,144 ft and 2,166 ft, crest of uncontrolled spillway and uncontrolled storage, 493,400 acre-ft between elevations 2,166 ft and 2,200 ft. Reservoir is used to store water for flood control, irrigation of 6,600 acres, and recreation. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 2,154.90 ft, July 2, 1951, July 4, 5, 1957, contents, 269,400 acre-ft; minimum elevation since irrigation pool was first filled, 2,092.20 ft, Sept. 28, 1992, contents, 10,450 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 2,135.57 ft, Oct. 1, contents, 120,600 acre-ft; minimum elevation, 2,132.50 ft, Sept. 30, contents, 105,100 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Capacity table placed in use October 1951)

Elevation	Contents	Elevation	Contents	Elevation	Contents
2,132	102,710	2,135	117,600	2,137	128,500
2,134	112,430	2,136	122,920	2,139	140,100



KANSAS RIVER BASIN

06861500 CEDAR BLUFF RESERVOIR NEAR ELLIS, KS—Continued

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,135.52	2,135.21	2,135.10	2,134.84	2,134.83	2,134.96	2,134.88	2,134.73	2,134.45	2,134.15	2,133.56	2,133.13
2	2,135.50	2,135.20	2,135.08	2,134.86	2,134.84	2,135.00	2,134.88	2,134.73	2,134.44	2,134.12	2,133.51	2,133.11
3	2,135.49	2,135.19	2,135.05	2,134.86	2,134.84	2,134.99	2,134.89	2,134.74	2,134.45	2,134.09	2,133.49	2,133.11
4	2,135.46	2,135.18	2,135.04	2,134.89	2,134.84	2,134.98	2,134.87	2,134.72	2,134.43	2,134.21	2,133.43	2,133.06
5	2,135.45	2,135.17	2,135.05	2,134.89	2,134.84	2,134.99	2,134.86	2,134.74	2,134.40	2,134.19	2,133.40	2,133.03
6	2,135.50	2,135.17	2,135.05	2,134.87	2,134.94	2,134.97	2,134.87	2,134.70	2,134.40	2,134.15	2,133.41	2,133.05
7	2,135.54	2,135.13	2,135.03	2,134.87	2,134.93	2,134.94	2,134.87	2,134.70	2,134.36	2,134.13	2,133.39	2,133.04
8	2,135.50	2,135.14	2,135.06	2,134.87	2,134.96	2,134.96	2,134.85	2,134.69	2,134.33	2,134.10	2,133.37	2,133.03
9	2,135.48	2,135.15	2,135.06	2,134.87	2,134.96	2,134.95	2,134.84	2,134.67	2,134.33	2,134.06	2,133.34	2,132.98
10	2,135.48	2,135.14	2,135.04	2,134.87	2,134.95	2,134.93	2,134.85	2,134.67	2,134.34	2,134.05	2,133.32	2,132.95
11	2,135.49	2,135.14	2,135.05	2,134.87	2,134.95	2,134.93	2,134.87	2,134.67	2,134.32	2,134.03	2,133.30	2,132.91
12	2,135.49	2,135.10	2,134.99	2,134.88	2,134.98	2,134.91	2,134.84	2,134.63	2,134.36	2,134.02	2,133.35	2,132.89
13	2,135.47	2,135.09	2,134.97	2,134.84	2,134.99	2,134.91	2,134.82	2,134.62	2,134.31	2,133.99	2,133.31	2,132.84
14	2,135.48	2,135.10	2,134.97	2,134.83	2,134.98	2,134.89	2,134.81	2,134.61	2,134.28	2,133.97	2,133.28	2,132.86
15	2,135.45	2,135.09	2,134.95	2,134.83	2,134.97	2,134.89	2,134.82	2,134.60	2,134.38	2,133.97	2,133.27	2,132.88
16	2,135.42	2,135.09	2,134.95	2,134.82	2,134.97	2,134.89	2,134.81	2,134.55	2,134.38	2,133.92	2,133.26	2,132.83
17	2,135.40	2,135.12	2,134.95	2,134.81	2,134.98	2,134.90	2,134.81	2,134.54	2,134.39	2,133.88	2,133.26	2,132.81
18	2,135.40	2,135.14	2,134.93	2,134.83	2,134.96	2,134.87	2,134.81	2,134.51	2,134.38	2,133.90	2,133.28	2,132.81
19	2,135.39	2,135.14	2,134.92	2,134.83	2,135.00	2,134.86	2,134.78	2,134.53	2,134.36	2,133.88	2,133.32	2,132.80
20	2,135.37	2,135.12	2,134.93	2,134.83	2,134.99	2,134.93	2,134.78	2,134.50	2,134.35	2,133.88	2,133.28	2,132.78
21	2,135.40	2,135.15	2,134.90	2,134.83	2,135.00	2,134.96	2,134.83	2,134.48	2,134.40	2,133.83	2,133.26	2,132.77
22	2,135.38	2,135.16	2,134.88	2,134.82	2,134.97	2,134.96	2,134.74	2,134.44	2,134.37	2,133.80	2,133.28	2,132.73
23	2,135.34	2,135.15	2,134.88	2,134.81	2,134.99	2,134.95	2,134.73	2,134.46	2,134.34	2,133.75	2,133.25	2,132.71
24	2,135.34	2,135.15	2,134.89	2,134.82	2,134.99	2,134.96	2,134.74	2,134.52	2,134.31	2,133.71	2,133.27	2,132.69
25	2,135.30	2,135.16	2,134.88	2,134.82	2,134.99	2,134.95	2,134.75	2,134.50	2,134.31	2,133.72	2,133.31	2,132.67
26	2,135.32	2,135.16	2,134.87	2,134.82	2,134.99	2,134.95	2,134.75	2,134.49	2,134.27	2,133.72	2,133.28	2,132.68
27	2,135.32	2,135.14	2,134.88	2,134.81	2,135.00	2,134.94	2,134.72	2,134.47	2,134.25	2,133.69	2,133.27	2,132.64
28	2,135.30	2,135.12	2,134.88	2,134.83	2,134.98	2,134.94	2,134.72	2,134.44	2,134.25	2,133.67	2,133.26	2,132.60
29	2,135.32	2,135.13	2,134.89	2,134.83	---	2,134.96	2,134.73	2,134.42	2,134.18	2,133.63	2,133.23	2,132.58
30	2,135.27	2,135.11	2,134.88	2,134.83	---	2,134.92	2,134.72	2,134.41	2,134.17	2,133.59	2,133.21	2,132.55
31	2,135.25	---	2,134.85	2,134.84	---	2,134.90	---	2,134.50	---	2,133.60	2,133.17	---
MEAN	2,135.41	2,135.14	2,134.96	2,134.84	2,134.95	2,134.94	2,134.81	2,134.58	2,134.34	2,133.92	2,133.32	2,132.85
MAX	2,135.54	2,135.21	2,135.10	2,134.89	2,135.00	2,135.00	2,134.89	2,134.74	2,134.45	2,134.21	2,133.56	2,133.13
MIN	2,135.25	2,135.09	2,134.85	2,134.81	2,134.83	2,134.86	2,134.72	2,134.41	2,134.17	2,133.59	2,133.17	2,132.55
(+)	118,900	118,200	116,800	116,700	117,500	117,100	116,100	115,000	113,300	110,400	108,300	105,300
(#)	-1,600	-700	-1,400	-100	+800	-400	-400	-1,000	-1,100	-1,700	-2,900	-3,000

CAL YR 2004 (#) -13,100
WTR YR 2005 (#) -15,100

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

KANSAS RIVER BASIN

85

06862700 SMOKY HILL RIVER NEAR SCHOENCHEN, KS

LOCATION.--Lat 38°42'42", long 99°20'48", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.29, T.15 S., R.18 W., Ellis County, Hydrologic Unit 10260006, on left bank, 0.5 mi west of Schoenchen and at mile 307.0.

DRAINAGE AREA.--5,760 mi².

PERIOD OF RECORD.--July 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,909.07 ft above NGVD of 1929. July 1964 to February 1985, water-stage recorder at site 3.8 mi upstream at different datum. February 1985 to July 2004, water-stage recorder at site 2.6 mi upstream at datum 13.41 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow mostly regulated since 1950 by Cedar Bluff Reservoir (station 06861500), 24.4 mi upstream. Natural flow also affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.01	e1.4	4.4	5.7	5.2	6.7	4.7	1.2	0.01	0.00	0.00
2	0.00	0.01	e1.5	3.9	5.6	5.3	6.6	4.7	1.2	0.00	0.00	0.00
3	0.00	0.01	e1.7	e3.8	5.4	5.1	6.3	4.8	1.3	0.01	0.00	0.00
4	0.00	0.01	e1.9	e3.7	5.3	5.0	6.2	4.9	1.5	0.01	0.00	0.00
5	0.00	0.01	e2.0	e3.8	5.7	4.8	6.1	5.0	1.3	0.01	0.00	0.00
6	0.00	0.01	e2.1	e4.1	7.9	5.1	6.2	4.9	0.95	0.01	0.00	0.00
7	0.00	0.02	e2.3	e4.4	9.6	5.4	5.9	4.9	0.76	0.00	0.00	0.00
8	0.01	0.02	e2.4	4.9	9.0	5.2	5.8	4.8	0.61	0.00	0.00	0.00
9	0.00	0.02	2.6	5.0	e6.6	5.0	5.8	4.5	0.49	0.00	0.00	0.00
10	0.01	0.02	2.4	5.1	e7.0	5.0	6.2	4.3	0.63	0.00	0.00	0.00
11	0.01	0.02	2.5	5.1	8.0	4.9	6.0	4.1	0.82	0.00	0.00	0.00
12	0.01	0.02	2.8	5.1	7.8	5.1	5.7	3.6	0.85	0.00	0.00	0.00
13	0.01	0.02	2.0	4.8	9.2	5.0	5.4	3.6	0.83	0.00	0.00	0.00
14	0.01	0.02	1.9	e4.4	8.1	4.9	5.3	3.2	0.54	0.00	0.00	0.00
15	0.01	0.02	2.6	e4.1	7.3	4.9	5.2	2.8	0.40	0.00	0.00	0.00
16	0.01	0.01	2.7	e4.0	6.7	5.1	5.1	2.7	0.51	0.00	0.00	0.00
17	0.01	0.02	2.8	e4.0	6.3	5.3	5.0	2.4	0.33	0.00	0.00	0.00
18	0.01	0.03	3.3	e4.2	6.1	5.3	5.9	1.9	0.26	0.00	0.00	0.00
19	0.01	0.02	3.1	4.6	6.3	4.9	5.6	1.6	0.22	0.00	0.00	0.00
20	0.01	0.01	3.9	6.0	6.2	6.0	5.3	1.2	0.17	0.00	0.00	0.00
21	0.00	0.02	3.1	10	5.9	18	5.0	0.86	0.21	0.00	0.00	0.00
22	0.00	0.02	2.7	e9.0	5.9	45	4.6	0.51	0.17	0.00	0.00	0.00
23	0.00	0.02	2.3	e8.0	5.9	20	4.3	0.39	0.13	0.00	0.00	0.00
24	0.00	e0.08	e2.5	7.2	5.8	13	4.4	0.47	0.11	0.00	0.00	0.00
25	0.00	e0.16	2.9	6.8	5.7	11	4.8	0.62	0.07	0.00	0.00	0.00
26	0.00	e0.24	3.2	6.2	5.7	10	4.7	0.66	0.05	0.00	0.00	0.00
27	0.00	e0.50	3.6	e6.0	5.5	9.1	4.5	0.41	0.03	0.00	0.00	0.00
28	0.00	e0.70	4.1	e6.0	5.4	8.6	4.6	0.40	0.02	0.00	0.00	0.00
29	0.00	e0.90	4.2	e5.8	---	8.1	4.7	0.48	0.02	0.00	0.00	0.00
30	0.01	e1.1	4.7	e5.7	---	7.6	4.8	0.52	0.01	0.00	0.00	0.00
31	0.00	---	4.4	e5.6	---	7.1	---	1.0	---	0.00	0.00	---
MEAN	0.00	0.14	2.76	5.35	6.63	8.39	5.42	2.61	0.52	0.00	0.00	0.00
MAX	0.01	1.1	4.7	10	9.6	45	6.7	5.0	1.5	0.01	0.00	0.00
MIN	0.00	0.01	1.4	3.7	5.3	4.8	4.3	0.39	0.01	0.00	0.00	0.00
AC-FT	0.3	8.1	170	329	368	516	323	161	31	0.1	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2005, BY WATER YEAR (WY)

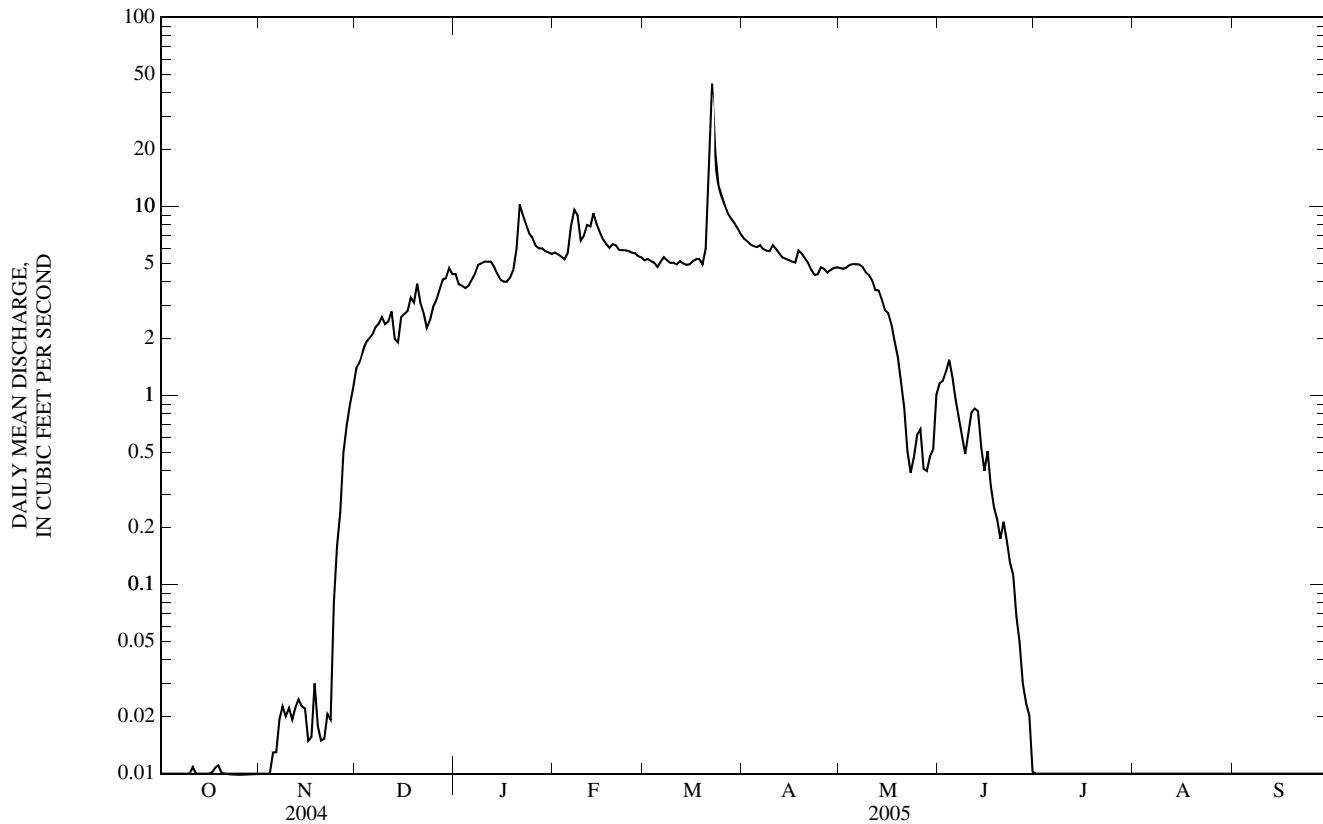
MEAN	10.3	14.5	9.89	10.5	15.7	25.6	25.2	20.5	38.4	48.2	30.1	14.5
(WY)	(1974)	(1966)	(1974)	(1974)	(1966)	(1979)	(1988)	(1998)	(1999)	(1970)	(1993)	(2001)
MAX	70.9	122	39.8	53.2	71.0	226	188	102	495	710	332	97.3
(WY)	(1992)	(1984)	(1992)	(1992)	(1992)	(1992)	(1989)	(1989)	(1989)	(1991)	(2005)	(1983)
MIN	0.00	0.00	0.00	0.11	0.39	0.38	0.09	0.31	0.45	0.00	0.00	0.00
(WY)	(1992)	(1984)	(1992)	(1992)	(1992)	(1992)	(1989)	(1989)	(1989)	(1991)	(2005)	(1983)

KANSAS RIVER BASIN

06862700 SMOKY HILL RIVER NEAR SCHOENCHEN, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1965 - 2005
ANNUAL MEAN	2.82	2.63	22.0
HIGHEST ANNUAL MEAN			83.5
LOWEST ANNUAL MEAN			0.49
HIGHEST DAILY MEAN	49	Jul 29	11,000
LOWEST DAILY MEAN	0.00	Jun 9	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 9	0.00
MAXIMUM PEAK FLOW		54	20,400
MAXIMUM PEAK STAGE		4.59	16.55
INSTANTANEOUS LOW FLOW		0.00	0.00
ANNUAL RUNOFF (AC-FT)	2,050	1,910	15,920
10 PERCENT EXCEEDS	6.3	6.2	27
50 PERCENT EXCEEDS	2.2	0.83	10
90 PERCENT EXCEEDS	0.00	0.00	0.28

e Estimated



KANSAS RIVER BASIN

87

06862850 SMOKY HILL RIVER BELOW SCHOENCHEN, KS

LOCATION.--Lat 38°42'44", long 99°17'31", in SW 1/4 SW 1/4 sec.26, T.15 S., R.18 W., Ellis County, Hydrologic Unit 10260006, on right bank, 1.5 mi upstream from Big Timber Creek, 2.1 mi east of Schoenchen, and at mile 304.9.

DRAINAGE AREA.--5,810 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,885.38 ft above NGVD of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow mostly regulated since 1950 by Cedar Bluff Reservoir (station 06861500), 28.8 mi upstream. Natural flow also affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.00	0.00	0.00	0.00	2.6	3.4	6.2	3.1	0.14	0.00	0.00	0.00
2	e0.00	0.00	0.00	0.00	2.6	3.4	5.9	3.5	0.09	0.00	0.00	0.00
3	e0.00	0.00	0.00	0.00	2.6	3.3	5.7	3.8	0.08	0.00	0.00	0.00
4	e0.00	0.00	0.00	0.00	3.7	e3.3	5.4	4.1	0.07	0.00	0.00	0.00
5	e0.00	0.00	0.00	0.00	4.1	e3.3	5.2	3.8	0.05	0.00	0.00	0.00
6	e0.00	0.00	0.00	0.00	5.5	e3.4	6.1	3.5	0.05	0.00	0.00	0.00
7	e0.00	0.00	0.00	0.00	7.1	e3.2	5.4	e3.0	0.04	0.00	0.00	0.00
8	e0.00	0.00	0.00	0.00	7.7	e3.4	5.1	e2.7	0.04	0.00	0.00	0.00
9	e0.00	0.00	e0.00	0.00	7.0	e3.1	5.0	e2.4	0.04	0.00	0.00	0.00
10	e0.00	0.00	e0.00	0.00	6.8	e2.9	4.9	e2.2	0.09	0.00	0.00	0.00
11	e0.00	0.00	e0.00	0.00	6.7	e2.7	7.9	2.0	0.15	0.00	0.00	0.00
12	e0.00	0.00	e0.00	0.00	6.6	e2.6	5.0	1.8	e0.04	0.00	0.00	0.00
13	e0.00	0.00	e0.00	e0.00	7.5	e2.6	4.4	1.7	e0.04	0.00	0.00	0.00
14	0.00	0.00	0.00	e0.00	6.6	e2.7	4.2	1.5	e0.04	0.00	0.00	0.00
15	0.00	0.00	0.00	e0.00	5.7	2.7	4.0	1.4	e0.05	0.00	0.00	0.00
16	0.00	0.00	0.00	e0.00	5.0	2.6	3.9	1.4	e0.05	0.00	0.00	0.00
17	0.00	0.00	0.00	e0.00	4.9	2.7	3.8	1.3	e0.05	0.00	0.00	0.00
18	0.00	0.00	0.00	e0.00	4.6	2.6	4.5	1.1	e0.05	0.00	0.00	0.00
19	0.00	0.00	0.00	e0.00	4.8	2.4	4.3	0.96	e0.05	0.00	0.00	0.00
20	0.00	0.00	0.00	e0.00	4.6	3.0	3.9	0.75	e0.05	0.00	0.00	0.00
21	0.00	0.00	0.00	e1.0	4.2	23	3.7	0.62	e0.05	0.00	0.00	0.00
22	0.00	0.00	0.00	e2.0	4.1	82	3.3	0.56	e0.04	0.00	0.00	0.00
23	0.00	0.00	0.00	e5.0	3.9	40	3.0	0.45	e0.03	0.00	0.00	0.00
24	0.00	0.00	0.00	e4.8	4.0	19	3.2	0.52	e0.03	0.00	0.00	0.00
25	0.00	0.00	0.00	3.3	3.8	14	3.6	0.35	e0.02	0.00	0.00	0.00
26	0.00	0.00	0.00	2.7	3.6	11	3.5	0.27	e0.01	0.00	0.00	0.00
27	0.00	0.00	0.00	2.6	3.6	9.7	3.2	0.20	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	2.6	3.5	8.8	3.1	0.17	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	2.6	---	8.3	3.1	0.14	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	2.4	---	7.4	3.1	0.13	0.00	0.00	0.00	0.00
31	0.00	---	0.00	2.7	---	6.4	---	0.18	---	0.00	0.00	---
MEAN	0.00	0.00	0.00	1.02	4.91	9.32	4.45	1.60	0.05	0.00	0.00	0.00
MAX	0.00	0.00	0.00	5.0	7.7	82	7.9	4.1	0.15	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	2.6	2.4	3.0	0.13	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	63	273	573	265	98	2.9	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2005, BY WATER YEAR (WY)

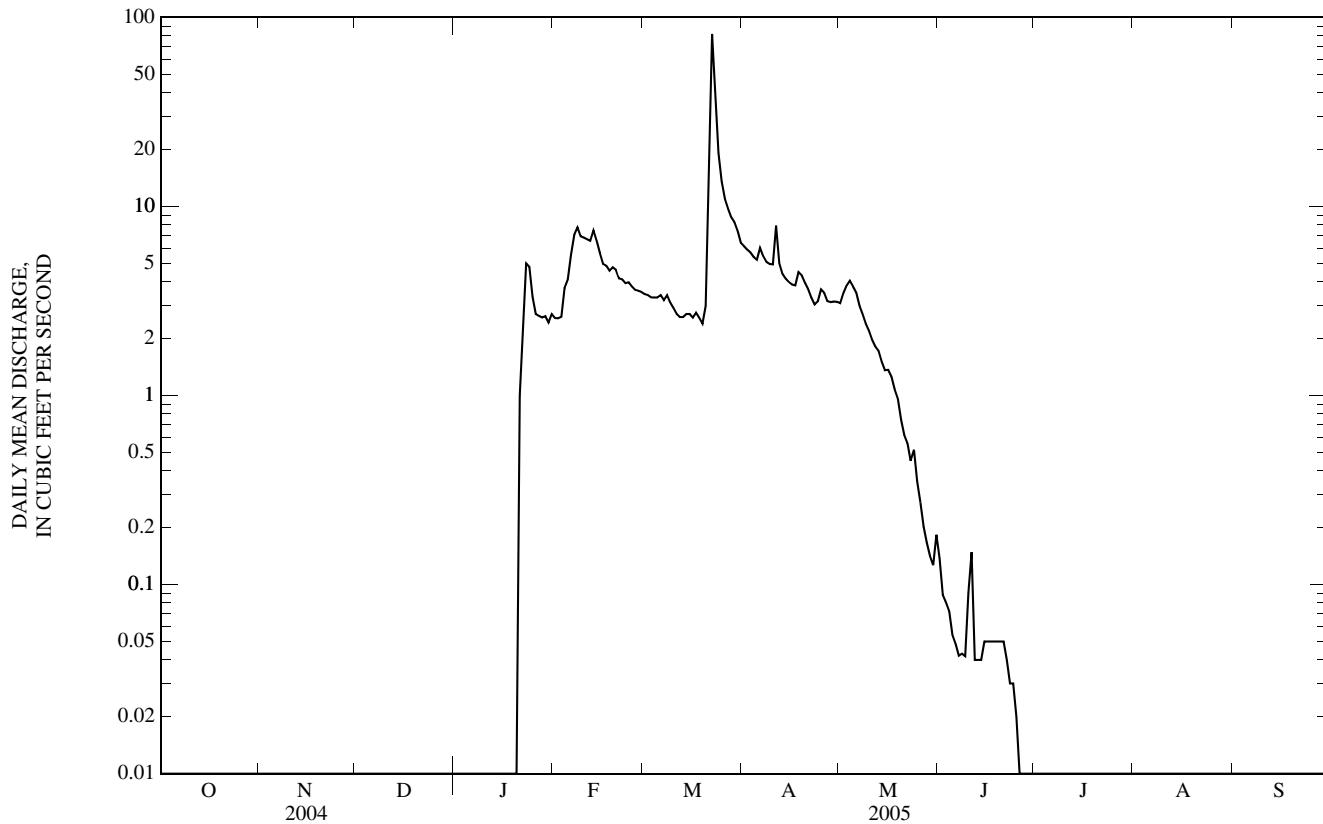
MEAN	3.32	7.32	4.83	4.76	9.09	17.3	28.3	21.1	17.8	48.3	34.3	13.9
(WY)	(1994)	(1997)	(1999)	(1999)	(1999)	(1993)	(1987)	(1999)	(1996)	(1993)	(1998)	(2001)
MAX	20.8	83.9	17.4	18.7	44.0	118	234	107	140	784	266	122
(WY)	(1982)	(1984)	(1984)	(1984)	(1984)	(1985)	(1985)	(1985)	(1985)	(1988)	(1983)	(1983)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1982)	(1984)	(1984)	(1984)	(1984)	(1985)	(1985)	(1985)	(1985)	(1988)	(1983)	(1983)

KANSAS RIVER BASIN

06862850 SMOKY HILL RIVER BELOW SCHOENCHEN, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1982 - 2005
ANNUAL MEAN	2.10	1.76	17.6
HIGHEST ANNUAL MEAN			94.4
LOWEST ANNUAL MEAN			0.00
HIGHEST DAILY MEAN	73	Jul 2	12,000
LOWEST DAILY MEAN	0.00	Jun 9	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 9	0.00
MAXIMUM PEAK FLOW		129	20,500
MAXIMUM PEAK STAGE		4.48	17.60
INSTANTANEOUS LOW FLOW		0.00	0.00
ANNUAL RUNOFF (AC-FT)	1,520	1,270	12,750
10 PERCENT EXCEEDS	5.5	4.8	22
50 PERCENT EXCEEDS	0.11	0.00	2.2
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated



KANSAS RIVER BASIN

89

06863000 SMOKY HILL RIVER AT PFEIFER, KS

LOCATION--Lat 38°42'53", long 99°09'12", in NE ¼ SE ¼ SE ¼ sec.25, T.15 S., R.17 W., Ellis County, Hydrologic Unit 10260006, near left upstream side of county bridge, 0.75 mi east and 0.25 mi north of Pfeifer, 5 mi upstream from Deer Creek, and 9 mi south of Victoria, and at mile 292.9.

DRAINAGE AREA.--6,033 mi².

PERIOD OF RECORD.--March 1929 to June 1932, annual maximum, water years 1970-85, August 2004 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,821.19 ft above NGVD of 1929. March 1929 to June 1921 at same site and datum. May 3, 1956, to June 30, 1961, low-flow recording gage 4.5 mi upstream at different datum. June 14, 1970, to July 29, 1985, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow mostly regulated since 1950 by Cedar Bluff Reservoir (station 06861500), 40.8 mi upstream. Natural flow also affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

**DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	0.07	e0.00	0.00	0.00	1.9	9.0	4.0	0.79	0.14	0.00	0.00
2	0.01	0.02	e0.00	0.00	0.00	1.9	8.4	3.8	0.70	0.03	0.00	0.00
3	0.01	0.02	0.00	0.00	0.00	1.8	8.0	3.8	0.77	0.01	0.00	0.00
4	0.01	0.04	0.00	0.00	0.00	1.8	7.6	3.8	0.72	0.00	0.00	0.00
5	0.01	0.05	0.00	0.00	0.00	1.3	7.3	3.7	e0.72	0.00	0.00	0.00
6	0.85	0.09	0.00	0.00	0.00	1.6	9.3	3.7	e0.56	0.00	0.00	0.00
7	1.4	0.05	0.00	0.00	0.00	1.3	9.0	3.5	e0.46	0.00	0.00	0.00
8	0.63	0.02	0.00	0.00	0.00	1.3	7.6	3.2	e0.31	0.00	0.00	0.00
9	0.50	0.07	0.00	0.00	0.00	1.4	6.9	2.8	0.23	0.00	0.00	0.00
10	0.35	0.12	0.00	0.00	e0.00	1.6	7.1	2.8	0.88	0.00	0.00	0.00
11	1.1	0.02	0.00	0.00	e1.1	1.3	7.7	2.6	17	0.00	0.00	0.00
12	1.2	0.02	0.00	0.00	2.7	1.1	9.2	2.5	14	0.00	0.00	0.00
13	0.86	0.02	0.00	0.00	4.4	0.91	7.9	2.5	5.7	0.00	0.00	0.00
14	0.69	0.02	0.00	0.00	4.1	1.2	7.6	3.0	3.8	0.00	0.00	0.00
15	0.48	0.04	0.00	0.00	3.9	1.5	6.3	2.9	7.7	0.00	0.00	0.00
16	0.35	0.05	0.00	0.00	3.3	1.5	5.6	2.2	100	0.00	0.00	0.00
17	0.42	0.01	0.00	0.00	2.9	1.5	5.3	1.9	34	0.00	0.00	0.00
18	0.37	0.00	0.00	0.00	2.7	0.99	5.8	1.7	17	0.00	0.00	0.00
19	0.19	0.00	0.00	0.00	3.1	1.2	5.5	1.6	8.9	0.00	0.00	0.00
20	0.18	0.00	0.00	0.00	2.9	1.7	5.1	1.4	5.5	0.00	0.00	0.00
21	0.12	0.00	0.00	0.00	2.8	19	4.8	1.1	8.1	0.00	0.00	0.00
22	0.11	0.00	0.00	0.00	2.5	106	4.3	0.75	4.0	0.00	0.00	0.00
23	0.07	0.00	0.00	0.00	2.6	87	4.1	0.66	2.9	0.00	0.00	0.00
24	0.05	0.00	0.00	0.00	2.4	46	4.0	1.1	2.3	0.00	0.00	0.00
25	0.02	0.00	0.00	0.00	2.3	30	4.3	0.83	2.1	0.00	0.00	0.00
26	0.05	0.00	0.00	0.00	2.2	21	4.4	0.74	2.0	0.00	0.00	0.00
27	0.05	0.00	0.00	0.00	2.1	16	4.1	0.67	1.6	0.00	0.00	0.00
28	0.12	0.00	0.00	0.00	2.0	14	4.0	0.60	1.4	0.00	0.00	0.00
29	0.15	0.00	0.00	0.00	---	13	4.1	0.56	0.99	0.00	0.00	0.00
30	0.05	e0.00	0.00	0.00	---	11	4.2	0.52	0.50	0.00	0.00	0.00
31	0.06	---	0.00	0.00	---	9.9	---	0.82	---	0.00	0.00	---
MEAN	0.34	0.02	0.00	0.00	1.79	13.0	6.28	2.12	8.19	0.01	0.00	0.00
MAX	1.4	0.12	0.00	0.00	4.4	106	9.3	4.0	100	0.14	0.00	0.00
MIN	0.01	0.00	0.00	0.00	0.00	0.91	4.0	0.52	0.23	0.00	0.00	0.00
AC-FT	21	1.4	0.00	0.00	99	797	374	130	487	0.4	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2005, BY WATER YEAR (WY)

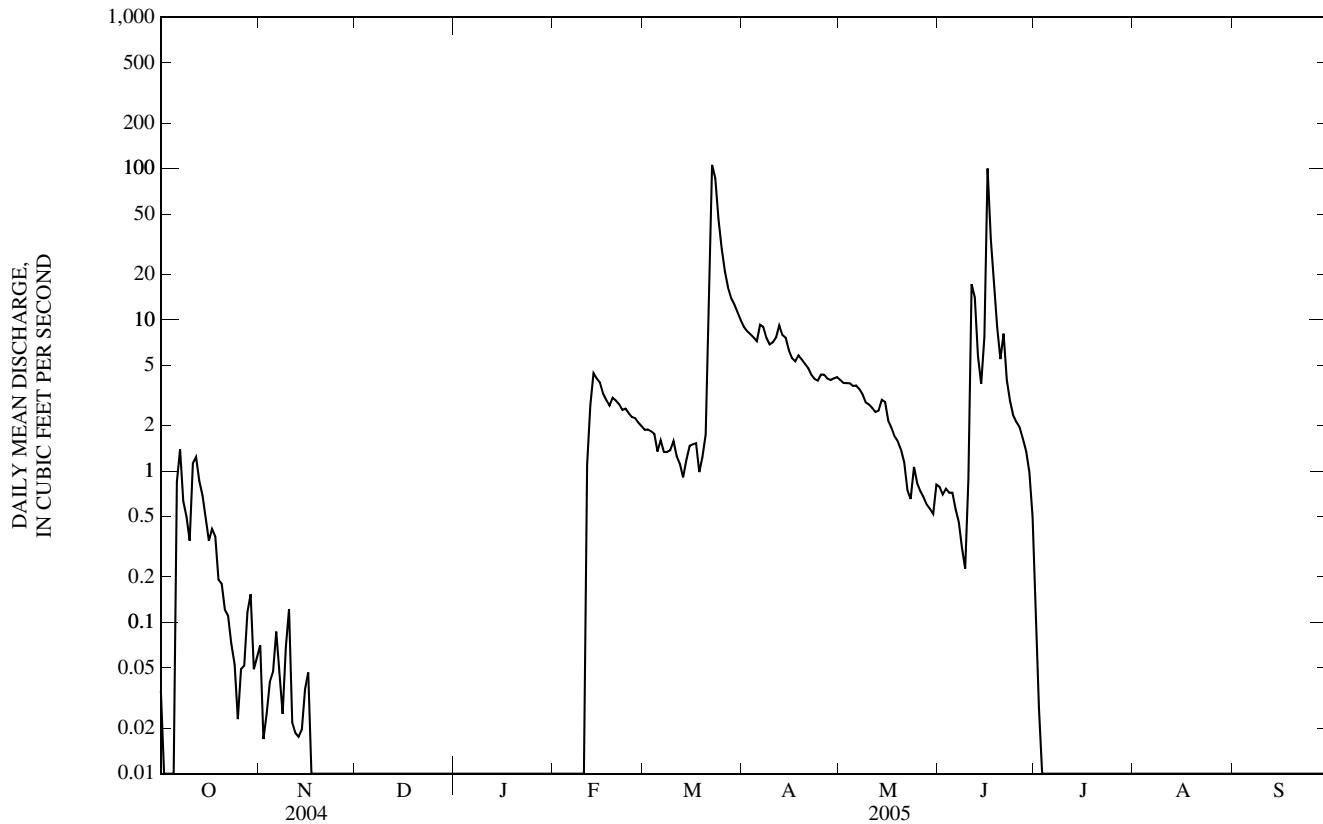
KANSAS RIVER BASIN

06863000 SMOKY HILL RIVER AT PFEIFER, KS—Continued

SUMMARY STATISTICS

	FOR 2005 WATER YEAR		WATER YEARS 1930 - 2005	
ANNUAL MEAN		2.64	75.0	
HIGHEST ANNUAL MEAN			149	1931
LOWEST ANNUAL MEAN			2.64	2005
HIGHEST DAILY MEAN	106	Mar 22	3,280	Oct 13, 1930
LOWEST DAILY MEAN	0.00	Nov 18	0.00	Nov 18, 2004
ANNUAL SEVEN-DAY MINIMUM	0.00	Nov 18	0.00	Nov 18, 2004
MAXIMUM PEAK FLOW	157	Jun 16	30,000	Jun 14, 1970
MAXIMUM PEAK STAGE	3.48	Jun 16	19.30	Jun 14, 1970
INSTANTANEOUS LOW FLOW	0.00	Nov 18	0.00	Sep 14, 2004
ANNUAL RUNOFF (AC-FT)	1,910		54,350	
10 PERCENT EXCEEDS		5.6	141	
50 PERCENT EXCEEDS		0.02	23	
90 PERCENT EXCEEDS		0.00	0.00	

e Estimated



KANSAS RIVER BASIN

91

06863500 BIG CREEK NEAR HAYS, KS

LOCATION.--Lat 38°51'08", long 99°19'05", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.9, T.14 S., R.18 W., Ellis County, Hydrologic Unit 10260007, on right bank near downstream side of U.S. Highway 183 bridge, 0.6 mi south of intersection with Highway 183 alternate (bypass) in Hays, and at mile 44.9.

DRAINAGE AREA.--549 mi².

PERIOD OF RECORD.--April 1946 to current year.

REVISED RECORDS.--WSP 1340: 1947-48(P).

GAGE.--Water-stage recorder. Elevation of gage is 1,953.88 ft above NGVD of 1929. Prior to Nov. 20, 1947, nonrecording gage, and Nov. 20, 1947, to Aug. 22, 1965, water-stage recorder and concrete control at site 0.7 mi downstream at datum 1,955.13 ft above NGVD of 1929. From Aug. 23, 1965, to Sept. 30, 1998, at site 13.2 mi downstream at datum 1,915 ft above mean NGVD of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, many small diversions upstream from station, and return flow from irrigated areas. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge	Gage height	Date	Time	Discharge	Gage height
		(ft ³ /s)	(ft)			(ft ³ /s)	(ft)
Mar. 21	0015	*287	*9.24				No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.06	1.4	e2.1	2.3	2.7	3.3	5.1	5.2	2.9	0.00	0.00	0.00
2	0.07	1.3	2.2	2.1	2.6	3.4	4.9	5.1	2.3	0.00	0.00	0.00
3	0.02	1.0	2.3	e2.1	2.7	3.5	4.4	4.8	4.2	1.4	0.00	0.00
4	0.03	1.2	2.4	e2.2	2.6	3.5	4.2	5.0	2.8	0.29	0.00	0.00
5	0.01	1.4	2.5	e2.3	2.6	3.2	4.2	5.0	2.2	10	0.00	0.00
6	26	1.9	2.4	e2.5	34	3.3	9.3	4.9	2.4	0.59	0.00	16
7	4.1	1.7	2.5	e2.8	6.0	3.2	4.3	4.4	2.2	0.16	0.00	0.20
8	1.0	1.6	2.7	e2.9	e4.9	3.1	3.9	4.0	1.8	0.02	0.00	0.00
9	0.55	1.5	2.6	e3.1	6.9	3.1	4.0	4.0	1.7	0.00	0.00	0.00
10	0.56	2.0	2.2	e3.0	4.7	3.3	31	4.3	8.8	0.00	0.00	0.00
11	7.4	2.3	2.1	e3.0	3.3	3.8	14	4.4	5.1	0.00	0.00	0.00
12	1.3	1.7	2.0	e3.0	3.7	4.0	6.8	4.2	2.9	0.00	7.8	0.00
13	0.74	1.9	1.6	e3.2	7.0	3.5	6.4	4.1	1.7	0.00	0.24	0.00
14	0.57	2.5	1.6	e3.6	4.1	3.2	6.3	3.8	1.1	0.00	0.00	0.00
15	0.51	2.3	1.6	e5.2	3.8	3.9	6.4	3.6	16	0.00	0.00	2.1
16	0.55	2.3	1.6	e5.6	3.6	4.3	6.1	3.9	16	0.00	0.00	0.00
17	0.66	2.4	1.9	e6.0	3.6	4.2	5.8	3.8	2.0	0.00	0.00	0.00
18	0.59	6.0	2.0	e7.0	3.1	3.8	8.5	3.6	1.6	1.5	0.00	0.00
19	0.52	2.6	1.8	17	3.4	3.9	6.0	3.4	1.4	0.40	0.57	0.00
20	0.54	2.3	1.9	23	3.6	24	5.8	3.0	1.2	0.00	0.03	0.00
21	0.63	2.9	1.9	20	4.0	104	5.6	3.2	2.5	0.00	0.00	0.00
22	0.61	2.4	e1.8	14	3.8	24	5.0	2.7	1.3	0.00	0.00	0.00
23	0.42	3.1	e1.8	9.1	3.7	8.9	4.8	3.0	0.74	0.00	0.08	0.00
24	0.50	2.5	e1.9	4.5	3.5	7.9	4.6	7.7	0.57	0.00	0.97	0.00
25	0.25	2.1	e1.9	3.4	3.7	5.9	6.6	3.1	0.46	0.00	0.00	0.00
26	0.27	2.2	e1.9	3.2	3.5	5.3	5.2	2.0	0.30	2.1	1.3	0.00
27	0.38	2.3	e1.9	3.0	3.6	5.6	4.5	1.9	0.20	0.00	0.00	0.00
28	0.62	2.0	2.1	3.0	3.5	5.6	4.3	1.8	0.16	0.00	0.07	0.00
29	0.60	e2.0	2.2	2.9	---	5.1	4.7	2.0	0.13	0.00	0.00	0.00
30	0.72	e2.0	2.2	2.8	---	5.4	4.7	4.9	0.12	0.00	0.00	0.00
31	0.75	---	2.3	2.7	---	4.9	---	10	---	0.00	0.00	---
MEAN	1.66	2.16	2.06	5.50	4.94	8.84	6.58	4.09	2.89	0.53	0.36	0.61
MAX	26	6.0	2.7	23	34	104	31	10	16	10	7.8	16
MIN	0.01	1.0	1.6	2.1	2.6	3.1	3.9	1.8	0.12	0.00	0.00	0.00
AC-FT	102	129	127	338	274	544	392	252	172	33	22	36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2005, BY WATER YEAR (WY)

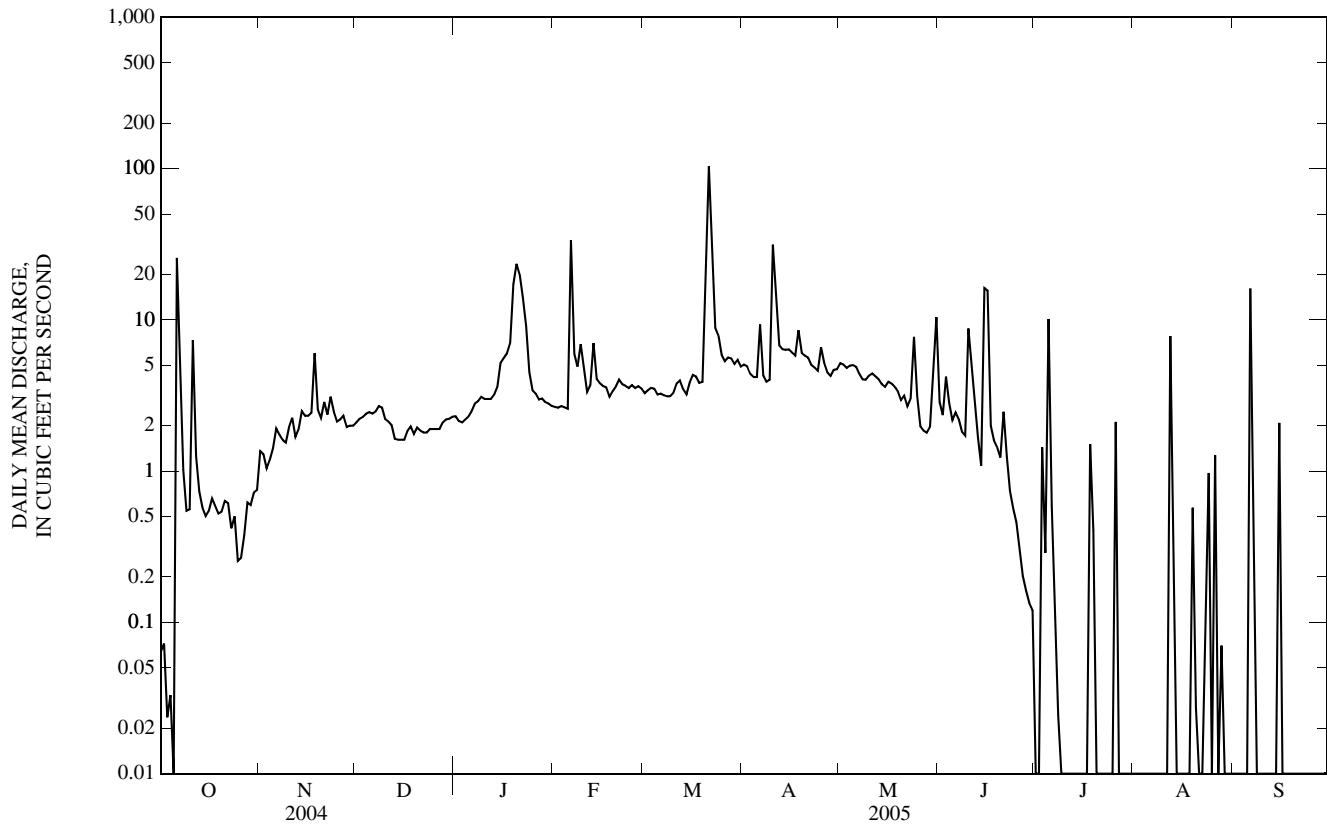
MEAN	21.0	12.0	9.28	9.90	14.6	22.6	25.9	45.6	93.7	61.4	41.9	22.0
MAX	465	115	36.7	59.7	113	173	298	520	1,805	606	266	189
(WY)	(1947)	(1997)	(1998)	(1974)	(1949)	(1960)	(1987)	(1995)	(1951)	(1993)	(1950)	(1957)
MIN	0.55	1.33	0.36	1.21	1.46	1.26	2.10	2.05	1.74	0.53	0.36	0.52
(WY)	(1948)	(1957)	(1957)	(1957)	(1955)	(1957)	(1954)	(1956)	(1956)	(2005)	(2005)	(1953)

KANSAS RIVER BASIN

06863500 BIG CREEK NEAR HAYS, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1947 - 2005
ANNUAL MEAN	4.85	3.34	31.7
HIGHEST ANNUAL MEAN			238
LOWEST ANNUAL MEAN			3.05
HIGHEST DAILY MEAN	232	Jul 28	10,600
LOWEST DAILY MEAN	0.00	Jun 10	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 7	0.00
MAXIMUM PEAK FLOW			22,400
MAXIMUM PEAK STAGE			29.00
INSTANTANEOUS LOW FLOW			0.00
ANNUAL RUNOFF (AC-FT)	3,520	2,420	22,980
10 PERCENT EXCEEDS	6.4	6.0	36
50 PERCENT EXCEEDS	2.2	2.2	7.6
90 PERCENT EXCEEDS	0.20	0.00	1.7

e Estimated



KANSAS RIVER BASIN

93

06864050 SMOKY HILL RIVER NEAR BUNKER HILL, KS

LOCATION.--Lat 38°47'38", long 98°46'51", in NW 1/4 SW 1/4 NW 1/4 sec.33, T.14 S., R.13 W., Russell County, Hydrologic Unit 10260006, on left bank at downstream side of county highway bridge, 0.5 mi upstream from Sellens Creek, 6.5 mi southwest of Bunker Hill, and at mile 261.6.

DRAINAGE AREA.--7,075 mi².

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1974, published as "near Russell."

REVISED RECORDS.--WSP 1340: 1941-42(M), 1944-45(M), 1950(P).

GAGE.--Water-stage recorder. Datum of gage is 1,670.05 ft above NGVD of 1929. Prior to Sept. 11, 1940, nonrecording gage and Sept. 11, 1940, to Sept. 30, 1974, water-stage recorder at site 4.7 mi upstream at datum 1,689.05 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow moderately regulated since 1950 by Cedar Bluff Reservoir (station 06861500), 72.1 mi upstream. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 30, 1938, reached a stage of about 29.0 ft, from floodmarks, discharge, about 70,000 ft³/s, from rating curve extended above 37,500 ft³/s, site and datum of 1939-74.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	7.0	14	14	21	20	31	23	17	e8.0	1.6	5.5
2	8.4	6.6	14	14	20	20	30	23	13	e7.8	1.4	7.1
3	8.1	6.7	14	15	19	20	29	22	37	e7.8	1.3	5.0
4	7.5	6.7	13	e14	19	19	27	22	33	e7.5	1.3	4.1
5	7.2	7.2	14	e13	19	19	27	22	20	e12	1.7	3.6
6	10	7.6	14	e13	27	19	39	23	16	e9.1	1.5	9.9
7	18	7.7	14	e14	e30	18	56	22	13	e7.6	1.3	87
8	15	7.4	14	e16	28	18	48	21	12	e8.7	51	26
9	21	7.8	14	e22	e28	18	45	20	9.7	e10	3.4	12
10	19	8.4	13	e20	e30	17	39	20	11	e7.4	1.7	12
11	17	9.1	13	e18	e30	17	57	19	20	e5.7	1.3	8.3
12	16	9.3	13	e18	31	17	96	18	17	e6.7	5.5	6.3
13	12	8.9	13	e18	35	16	78	18	17	7.4	4.6	5.1
14	11	8.8	13	18	49	16	54	17	20	6.4	2.5	4.4
15	10	9.1	14	19	46	15	41	17	18	6.0	1.8	6.3
16	11	9.3	13	19	37	16	36	16	312	5.3	1.6	5.5
17	9.8	9.9	13	20	31	16	33	16	307	4.9	1.6	3.7
18	8.6	12	13	e20	27	16	31	15	112	6.1	5.5	3.3
19	7.6	14	13	e22	27	15	30	14	62	5.2	4.2	3.0
20	7.5	13	14	e24	26	15	29	13	39	4.2	3.6	3.0
21	7.6	13	12	e26	25	19	28	13	29	3.4	5.7	3.4
22	7.5	13	12	e26	24	27	26	11	26	3.1	5.4	2.9
23	7.0	14	e12	e26	23	153	27	11	26	2.8	5.1	2.7
24	6.6	13	e14	e34	22	147	24	13	20	2.6	7.1	2.8
25	6.3	13	16	e36	21	83	24	11	17	2.5	6.7	2.6
26	6.7	13	17	e34	21	58	24	9.8	16	2.9	6.0	2.2
27	6.7	13	16	e30	21	47	24	9.6	14	2.7	6.3	2.0
28	7.1	13	15	27	21	41	23	10	12	2.4	87	1.8
29	7.0	14	16	24	---	36	24	11	e10	2.0	17	1.8
30	6.5	14	15	23	---	33	24	12	e11	1.9	8.1	1.7
31	6.7	---	15	22	---	32	---	14	---	1.7	6.0	---
MEAN	9.98	10.3	13.9	21.3	27.1	33.0	36.8	16.3	42.9	5.54	8.35	8.17
MAX	21	14	17	36	49	153	96	23	312	12	87	87
MIN	6.3	6.6	12	13	19	15	23	9.6	9.7	1.7	1.3	1.7
AC-FT	614	614	853	1,310	1,500	2,030	2,190	1,000	2,550	341	513	486

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2005, BY WATER YEAR (WY)

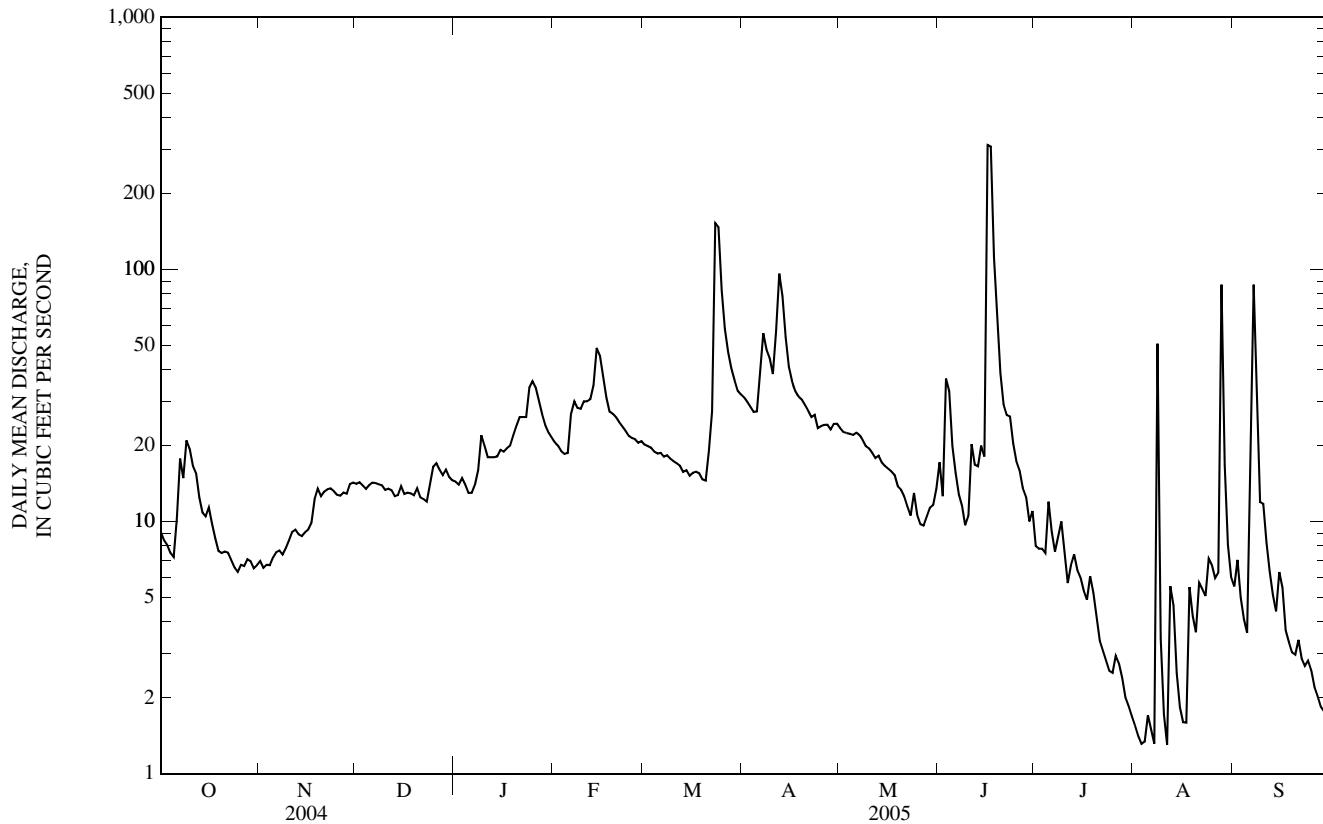
MEAN	96.3	52.0	36.8	37.4	70.5	134	160	208	364	350	232	169
(WY)	1,774	455	276	349	716	1,094	1,970	1,624	4,415	3,716	3,157	1,519
(1947)	(1997)	(1974)	(1974)	(1949)	(1949)	(1979)	(1987)	(1951)	(1951)	(1993)	(1950)	(1951)
MIN	0.78	2.27	2.00	1.65	4.83	8.83	5.50	5.29	10.3	1.85	0.57	0.34
(WY)	(1984)	(1940)	(1940)	(1940)	(1940)	(1992)	(1940)	(1989)	(1983)	(1983)	(1983)	(1983)

KANSAS RIVER BASIN

06864050 SMOKY HILL RIVER NEAR BUNKER HILL, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1940 - 2005	
ANNUAL MEAN	62.4		19.3		160	
HIGHEST ANNUAL MEAN					1,004	1951
LOWEST ANNUAL MEAN					11.4	1983
HIGHEST DAILY MEAN	3,310	Jul 30	312	Jun 16	28,400	Jul 22, 1993
LOWEST DAILY MEAN	4.0	Jun 14	1.3	Aug 3	0.00	Jan 29, 1940
ANNUAL SEVEN-DAY MINIMUM	4.7	Jun 9	1.4	Aug 1	0.00	Sep 11, 1955
MAXIMUM PEAK FLOW			739	Jun 16	39,500	May 23, 1951
MAXIMUM PEAK STAGE			5.65	Jun 16	27.14	Jul 22, 1993
INSTANTANEOUS LOW FLOW			1.1	Aug 11	0.00	at times
ANNUAL RUNOFF (AC-FT)	45,280		14,010		115,600	
10 PERCENT EXCEEDS	67		33		258	
50 PERCENT EXCEEDS	15		14		35	
90 PERCENT EXCEEDS	7.4		3.4		7.3	

e Estimated



KANSAS RIVER BASIN

95

06864500 SMOKY HILL RIVER AT ELLSWORTH, KS

LOCATION.--Lat 38°43'36", long 98°14'00", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.20, T.15 S., R.8 W., Ellsworth County, Hydrologic Unit 10260006, on left bank at downstream side of bridge on Kansas Highway 14 in Ellsworth, 2.0 mi downstream from Turkey Creek, and at mile 213.7.

DRAINAGE AREA.--7,580 mi², approximately.

PERIOD OF RECORD.--April 1895 to October 1905, July 1918 to July 1925, August 1928 to current year.

REVISED RECORDS.--WSP 796-B: 1903. WSP 806: Drainage area. WSP 1176: 1923. WSP 1440: 1895-1905, 1919, 1921, 1929-30(M), 1936-37(M).

GAGE.--Water-stage recorder. Datum of gage is 1,509.02 ft above NGVD of 1929. Prior to Oct. 31, 1905, nonrecording gage at present site at datum 1.61 ft higher. July 23, 1918, to July 4, 1925, and Aug. 1, 1928, to Nov. 29, 1939, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow moderately regulated since 1950 by Cedar Bluff Reservoir (station 06861500), 120 mi upstream. Natural flow also affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1927 reached a stage of 25.7 ft, from floodmarks, discharge, 44,800 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	16	27	26	e28	34	48	44	27	20	4.0	20
2	19	15	27	25	e27	34	45	42	25	19	3.6	16
3	18	15	27	e22	e26	33	44	41	29	17	3.5	15
4	17	15	27	e22	e25	33	43	39	30	17	3.5	13
5	16	15	e27	e20	e25	32	41	38	39	16	3.5	11
6	17	15	e27	e20	e27	31	102	37	38	17	3.4	11
7	20	15	27	e20	e30	31	769	36	28	17	3.5	13
8	21	15	26	e20	e32	30	261	36	24	15	3.9	11
9	22	16	26	e26	e34	29	159	35	21	14	3.9	31
10	22	18	25	e26	e38	29	122	35	22	13	13	29
11	26	19	25	e26	46	28	320	34	27	13	11	21
12	27	18	24	e25	62	29	115	32	41	14	12	18
13	25	18	23	e27	65	28	136	36	41	13	14	16
14	23	18	23	e28	70	28	138	33	37	12	11	14
15	22	19	23	e28	58	28	116	32	30	11	10	13
16	21	20	24	e28	e57	28	91	30	31	10	9.1	13
17	20	20	25	e29	60	27	79	29	27	9.5	8.5	12
18	20	22	24	e30	53	27	72	28	202	12	8.5	11
19	19	23	23	e34	49	27	68	27	163	12	7.6	9.8
20	18	24	24	e40	46	26	63	26	103	11	10	8.9
21	19	25	24	e44	43	48	59	25	73	8.8	10	7.7
22	19	25	23	e44	41	53	54	24	55	7.8	22	6.4
23	17	25	e22	e44	39	42	51	22	44	7.2	17	7.2
24	16	25	e22	e50	38	47	50	22	38	6.4	21	6.3
25	16	25	e24	e50	37	122	51	22	35	5.7	19	5.9
26	17	25	e28	e46	37	102	49	21	31	6.7	18	5.4
27	17	26	32	e40	36	82	47	20	28	7.1	16	5.1
28	17	26	e30	e36	35	70	46	19	25	6.4	14	4.9
29	17	28	e30	e34	---	62	45	19	22	5.5	12	4.8
30	16	28	32	e32	---	57	44	20	21	4.8	37	4.8
31	16	---	29	e30	---	52	---	24	---	4.4	28	---
MEAN	19.4	20.5	25.8	31.4	41.6	42.9	111	29.9	45.2	11.4	11.7	12.2
MAX	27	28	32	50	70	122	769	44	202	20	37	31
MIN	16	15	22	20	25	26	41	19	21	4.4	3.4	4.8
AC-FT	1,190	1,220	1,590	1,930	2,310	2,640	6,600	1,840	2,690	701	717	724

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 2005, BY WATER YEAR (WY)

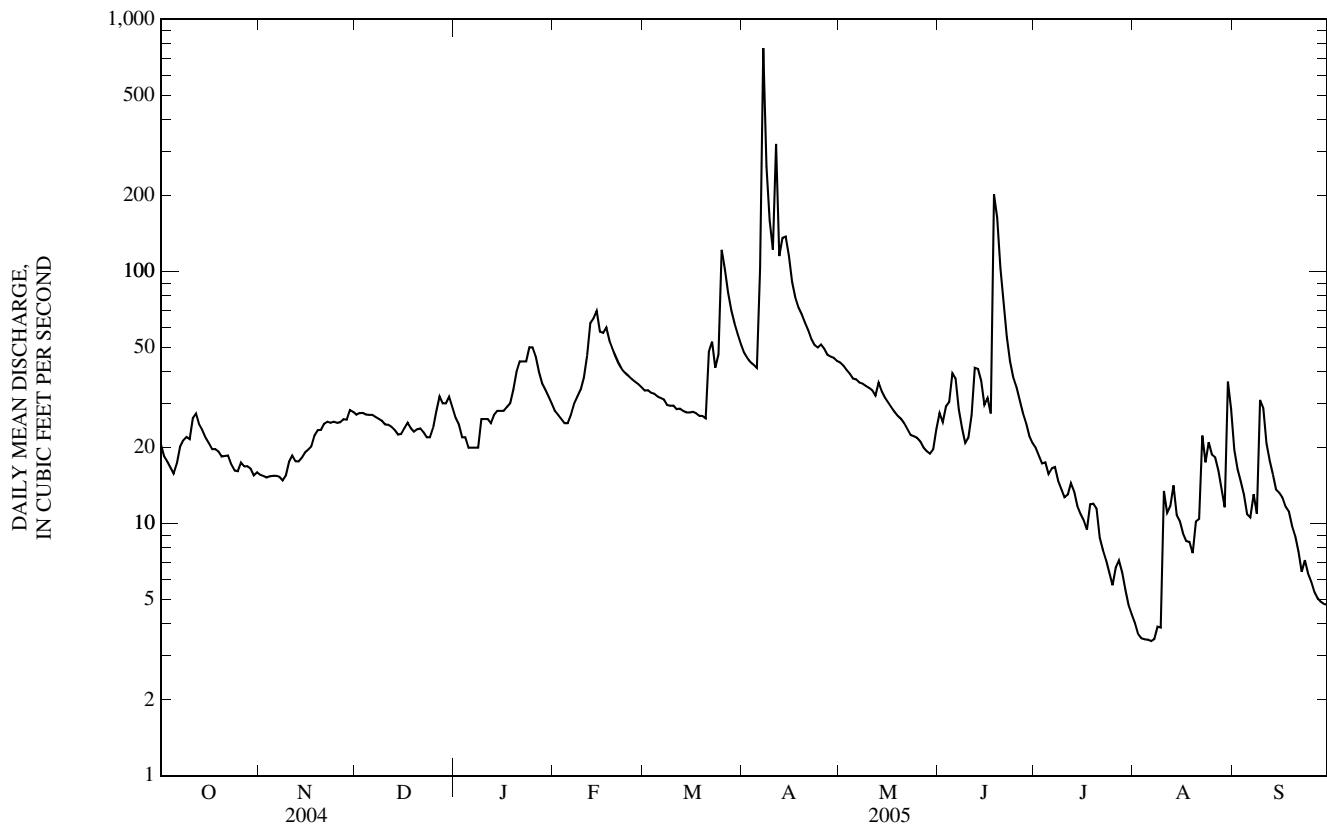
MEAN	149	84.4	57.3	56.3	90.2	175	224	378	554	468	308	254
MAX	1,769	662	598	662	1,099	2,039	2,709	2,700	6,270	5,846	3,300	2,144
(WY)	(1947)	(1997)	(1974)	(1974)	(1993)	(1973)	(1987)	(1903)	(1951)	(1993)	(1950)	(1951)
MIN	5.06	9.30	7.94	4.32	5.29	16.4	11.0	11.4	24.2	5.10	4.16	1.68
(WY)	(1922)	(1989)	(1899)	(1937)	(1899)	(1935)	(1923)	(1899)	(1988)	(1901)	(1983)	(1956)

KANSAS RIVER BASIN

06864500 SMOKY HILL RIVER AT ELLSWORTH, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1896 - 2005
ANNUAL MEAN	76.6	33.4	234
HIGHEST ANNUAL MEAN			1,377
LOWEST ANNUAL MEAN			29.1
HIGHEST DAILY MEAN	2,130	Jul 31	41,800
LOWEST DAILY MEAN	13	Jun 14	0.60
ANNUAL SEVEN-DAY MINIMUM	15	Jun 11	1.0
MAXIMUM PEAK FLOW		769	61,000
MAXIMUM PEAK STAGE		Apr 7	27.20
INSTANTANEOUS LOW FLOW		1,140	Jun 1, 1938
ANNUAL RUNOFF (AC-FT)	55,620	5.74	Sep 25, 1956
10 PERCENT EXCEEDS	134	3.6	Sep 28, 1956
50 PERCENT EXCEEDS	28	Aug 2	27.20
90 PERCENT EXCEEDS	18	Aug 6	Jun 1, 1938
		3.0	0.00
		9.7	Sep 28, 1956

e Estimated



06865000 KANOPOLIS LAKE NEAR KANOPOLIS, KS

LOCATION.--Lat $38^{\circ}36'25''$, long $97^{\circ}58'00''$, in SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.3, T.17 S., R.6 W., Ellsworth County, Hydrologic Unit 10260006, in control tower at dam on Smoky Hill River, 12 mi southeast of Kanopolis, 25 mi southwest of Salina, and at mile 183.7.

DRAINAGE AREA.--7,857 mi².

PERIOD OF RECORD.--February 1948 to current year (monthly records only prior to October 1956). Prior to October 1971, published as "Kanopolis Reservoir."

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Army Corps of Engineers).

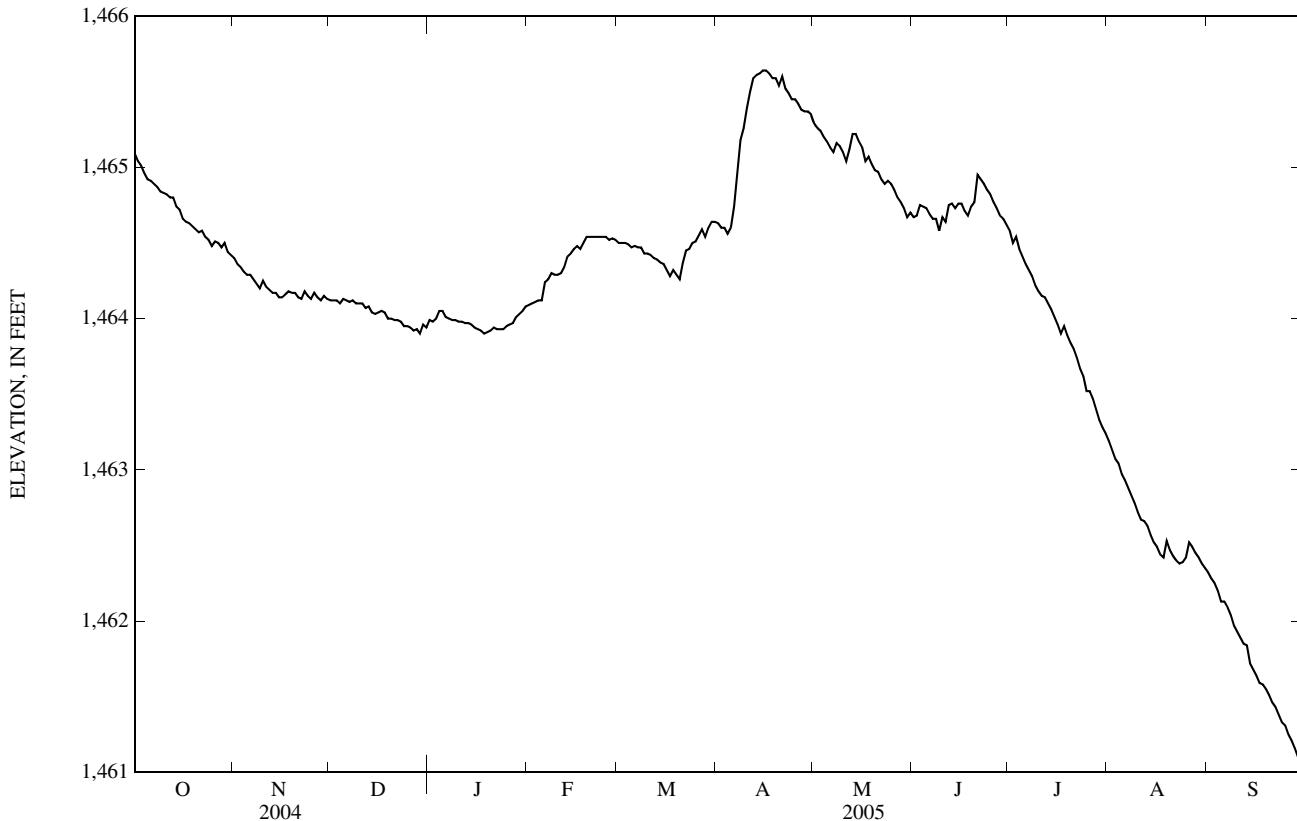
REMARKS.--Records good. Reservoir is formed by earthfill dam. Storage began Feb. 17, 1948, and dam was completed in same year. Current conservation pool elevation first reached July 1948. Capacity, 425,700 acre-ft between elevations 1,415 ft, sill of outlet gage, and 1,508 ft. Crest of uncontrolled spillway is at elevation 1,507 ft. Storage capacity of 356,700 acre-ft above elevation 1,463 ft is provided for flood control. Storage capacity of 55,800 acre-ft below elevation 1,463 ft is provided for conservation and recreation. Inflow partly regulated by Cedar Bluff Reservoir (station 06861500). Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,506.98 ft, July 14, 1951, contents, 435,100 acre-ft; minimum elevation since conservation pool was first filled, 1,453.50 ft, Sept. 30, 1988, contents, 29,870 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,465.66 ft, Apr. 16, contents, 65,950 acre-ft; minimum elevation, 1,461.04 ft, Jan. 10, contents, 49,210 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey made in 1971 by U.S. Army Corps of Engineers and revised in 1982)

Elevation	Contents	Elevation	Contents	Elevation	Contents
1,460	45,990	1,465	63,280	1,470	85,690



KANSAS RIVER BASIN

06865000 KANOPOLIS LAKE NEAR KANOPOLIS, KS—Continued

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,465.09	1,464.40	1,464.12	1,463.99	1,464.09	1,464.50	1,464.63	1,465.29	1,464.67	1,464.58	1,463.19	1,462.32
2	1,465.04	1,464.36	1,464.12	1,463.98	1,464.10	1,464.50	1,464.60	1,465.26	1,464.68	1,464.50	1,463.13	1,462.28
3	1,465.01	1,464.34	1,464.12	1,464.00	1,464.11	1,464.50	1,464.60	1,465.24	1,464.75	1,464.54	1,463.07	1,462.25
4	1,464.96	1,464.31	1,464.10	1,464.05	1,464.12	1,464.49	1,464.56	1,465.20	1,464.74	1,464.46	1,463.04	1,462.20
5	1,464.92	1,464.29	1,464.13	1,464.05	1,464.12	1,464.47	1,464.60	1,465.17	1,464.73	1,464.41	1,462.97	1,462.13
6	1,464.91	1,464.29	1,464.12	1,464.01	1,464.24	1,464.48	1,464.74	1,465.13	1,464.69	1,464.36	1,462.93	1,462.13
7	1,464.89	1,464.26	1,464.11	1,464.00	1,464.26	1,464.47	1,464.97	1,465.10	1,464.66	1,464.32	1,462.88	1,462.09
8	1,464.87	1,464.23	1,464.12	1,463.99	1,464.30	1,464.47	1,465.18	1,465.16	1,464.66	1,464.28	1,462.83	1,462.04
9	1,464.84	1,464.20	1,464.10	1,463.99	1,464.29	1,464.43	1,465.26	1,465.14	1,464.58	1,464.22	1,462.78	1,461.97
10	1,464.83	1,464.25	1,464.10	1,463.98	1,464.29	1,464.43	1,465.39	1,465.10	1,464.67	1,464.18	1,462.72	1,461.93
11	1,464.82	1,464.21	1,464.10	1,463.98	1,464.30	1,464.42	1,465.50	1,465.04	1,464.64	1,464.15	1,462.67	1,461.89
12	1,464.80	1,464.19	1,464.07	1,463.97	1,464.34	1,464.40	1,465.59	1,465.12	1,464.75	1,464.14	1,462.66	1,461.85
13	1,464.80	1,464.17	1,464.08	1,463.97	1,464.41	1,464.39	1,465.61	1,465.22	1,464.76	1,464.10	1,462.63	1,461.84
14	1,464.74	1,464.17	1,464.04	1,463.96	1,464.43	1,464.37	1,465.62	1,465.22	1,464.73	1,464.06	1,462.57	1,461.72
15	1,464.72	1,464.14	1,464.03	1,463.94	1,464.46	1,464.36	1,465.64	1,465.17	1,464.76	1,464.01	1,462.52	1,461.68
16	1,464.66	1,464.14	1,464.04	1,463.93	1,464.48	1,464.32	1,465.64	1,465.13	1,464.76	1,463.96	1,462.49	1,461.64
17	1,464.64	1,464.16	1,464.05	1,463.92	1,464.46	1,464.28	1,465.62	1,465.04	1,464.71	1,463.90	1,462.44	1,461.59
18	1,464.63	1,464.18	1,464.04	1,463.90	1,464.50	1,464.32	1,465.59	1,465.07	1,464.68	1,463.95	1,462.42	1,461.58
19	1,464.61	1,464.17	1,464.00	1,463.91	1,464.54	1,464.29	1,465.59	1,465.02	1,464.74	1,463.89	1,462.53	1,461.55
20	1,464.59	1,464.17	1,464.00	1,463.92	1,464.54	1,464.26	1,465.54	1,464.98	1,464.77	1,463.84	1,462.47	1,461.51
21	1,464.57	1,464.14	1,463.99	1,463.94	1,464.54	1,464.37	1,465.60	1,464.97	1,464.95	1,463.80	1,462.43	1,461.46
22	1,464.58	1,464.13	1,463.99	1,463.93	1,464.54	1,464.45	1,465.52	1,464.92	1,464.92	1,463.74	1,462.40	1,461.43
23	1,464.54	1,464.18	1,463.98	1,463.93	1,464.54	1,464.46	1,465.49	1,464.89	1,464.89	1,463.67	1,462.38	1,461.38
24	1,464.52	1,464.15	1,463.95	1,463.93	1,464.54	1,464.50	1,465.45	1,464.91	1,464.85	1,463.62	1,462.39	1,461.33
25	1,464.48	1,464.13	1,463.95	1,463.95	1,464.54	1,464.51	1,465.45	1,464.89	1,464.82	1,463.52	1,462.42	1,461.31
26	1,464.51	1,464.17	1,463.94	1,463.96	1,464.52	1,464.55	1,465.42	1,464.85	1,464.77	1,463.52	1,462.52	1,461.25
27	1,464.50	1,464.14	1,463.92	1,463.97	1,464.53	1,464.59	1,465.38	1,464.80	1,464.73	1,463.47	1,462.49	1,461.21
28	1,464.47	1,464.12	1,463.93	1,464.01	1,464.52	1,464.54	1,465.37	1,464.77	1,464.68	1,463.40	1,462.45	1,461.16
29	1,464.50	1,464.15	1,463.90	1,464.03	---	1,464.60	1,465.37	1,464.73	1,464.66	1,463.33	1,462.42	1,461.10
30	1,464.44	1,464.13	1,463.96	1,464.05	---	1,464.64	1,465.35	1,464.67	1,464.62	1,463.28	1,462.38	1,461.05
31	1,464.42	---	1,463.94	1,464.08	---	1,464.64	---	1,464.70	---	1,463.24	1,462.35	---
MEAN	1,464.71	1,464.20	1,464.03	1,463.97	1,464.38	1,464.45	1,465.30	1,465.03	1,464.73	1,463.95	1,462.63	1,461.70
MAX	1,465.09	1,464.40	1,464.13	1,464.08	1,464.54	1,464.64	1,465.64	1,465.29	1,464.95	1,464.58	1,463.19	1,462.32
MIN	1,464.42	1,464.12	1,463.90	1,463.90	1,464.09	1,464.26	1,464.56	1,464.67	1,464.58	1,463.24	1,462.35	1,461.05
(+)	61,020	59,920	59,200	59,730	61,400	61,870	64,680	62,100	61,790	56,640	53,530	49,240
(#)	-2,740	-1,100	-720	+530	+1,670	+470	+2,810	-2,580	-310	-5,150	-3,110	-4,290

CAL YR 2004 (#) -260

WTR YR 2005 (#) -14,520

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

KANSAS RIVER BASIN

99

06865500 SMOKY HILL RIVER NEAR LANGLEY, KS

LOCATION.--Lat 38°36'41", long 97°57'09", in SW 1/4 SW 1/4 sec.35, T.16 S., R.6 W., Ellsworth County, Hydrologic Unit 10260008, on left bank at downstream side of county highway bridge, 0.8 mi downstream from Kanopolis Dam, 5.0 mi north of Langley, and at mile 182.9.

DRAINAGE AREA.--7,857 mi².

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1310: 1942(M).

GAGE.--Water-stage recorder. Datum of gage is 1,395.66 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Apr. 1, 1952, water-stage recorder at datum 7.00 ft higher. Apr. 1, 1952, to Oct. 1, 1973, water-stage recorder at datum 5.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow completely regulated since 1948 by Kanopolis Lake (station 06865000), 0.8 mi upstream. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1938 reached a stage of 33.9 ft, present datum, from information by U.S. Army Corps of Engineers, discharge, about 45,000 ft³/s by extension of subsequent rating curve above 16,000 ft³/s and correlation of peak flow at adjacent stations.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	44	32	26	30	42	47	73	55	62	53	47
2	72	43	32	27	30	42	47	72	54	68	52	47
3	71	41	31	28	31	42	47	70	56	66	51	47
4	69	40	31	28	31	42	47	69	59	66	50	46
5	67	40	31	e28	31	42	47	68	59	63	52	46
6	65	38	32	e27	33	42	52	67	57	61	54	46
7	65	36	33	27	36	41	57	65	56	59	54	46
8	63	34	33	27	36	41	68	65	56	59	53	45
9	61	34	32	27	36	41	73	66	54	58	53	45
10	60	33	32	26	36	41	76	64	55	54	52	45
11	61	33	32	26	36	40	81	64	56	54	52	45
12	60	32	32	26	36	40	88	63	58	52	52	45
13	58	32	31	26	39	39	89	68	61	52	52	44
14	57	32	31	26	39	39	91	71	60	51	52	45
15	56	32	31	26	41	39	94	69	58	56	53	46
16	55	31	31	25	41	38	95	66	60	61	53	47
17	53	31	30	25	41	37	95	64	59	59	53	40
18	53	32	30	24	42	37	95	64	57	59	55	40
19	52	32	30	24	43	37	95	64	58	59	56	40
20	51	31	29	24	43	36	96	63	61	57	54	42
21	51	31	29	24	43	40	95	62	63	56	54	43
22	50	31	29	24	43	42	94	61	68	54	54	43
23	49	32	27	24	43	43	89	60	67	53	54	43
24	49	33	27	25	43	44	85	61	65	51	54	43
25	48	32	26	25	43	44	84	59	63	53	53	44
26	49	32	26	25	43	45	81	59	61	54	52	43
27	48	32	26	26	43	46	79	58	59	53	51	43
28	47	31	26	26	43	46	76	57	57	52	50	42
29	46	32	26	28	---	47	76	56	56	50	49	43
30	45	31	26	28	---	48	75	54	55	49	42	30
31	45	---	26	29	---	48	---	54	---	52	46	---
MEAN	56.5	33.9	29.7	26.0	38.4	41.6	77.1	63.7	58.8	56.5	52.1	43.7
MAX	75	44	33	29	43	48	96	73	68	68	56	47
MIN	45	31	26	24	30	36	47	54	54	49	42	30
AC-FT	3,470	2,020	1,820	1,600	2,130	2,560	4,590	3,920	3,500	3,480	3,200	2,600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2005, BY WATER YEAR (WY)

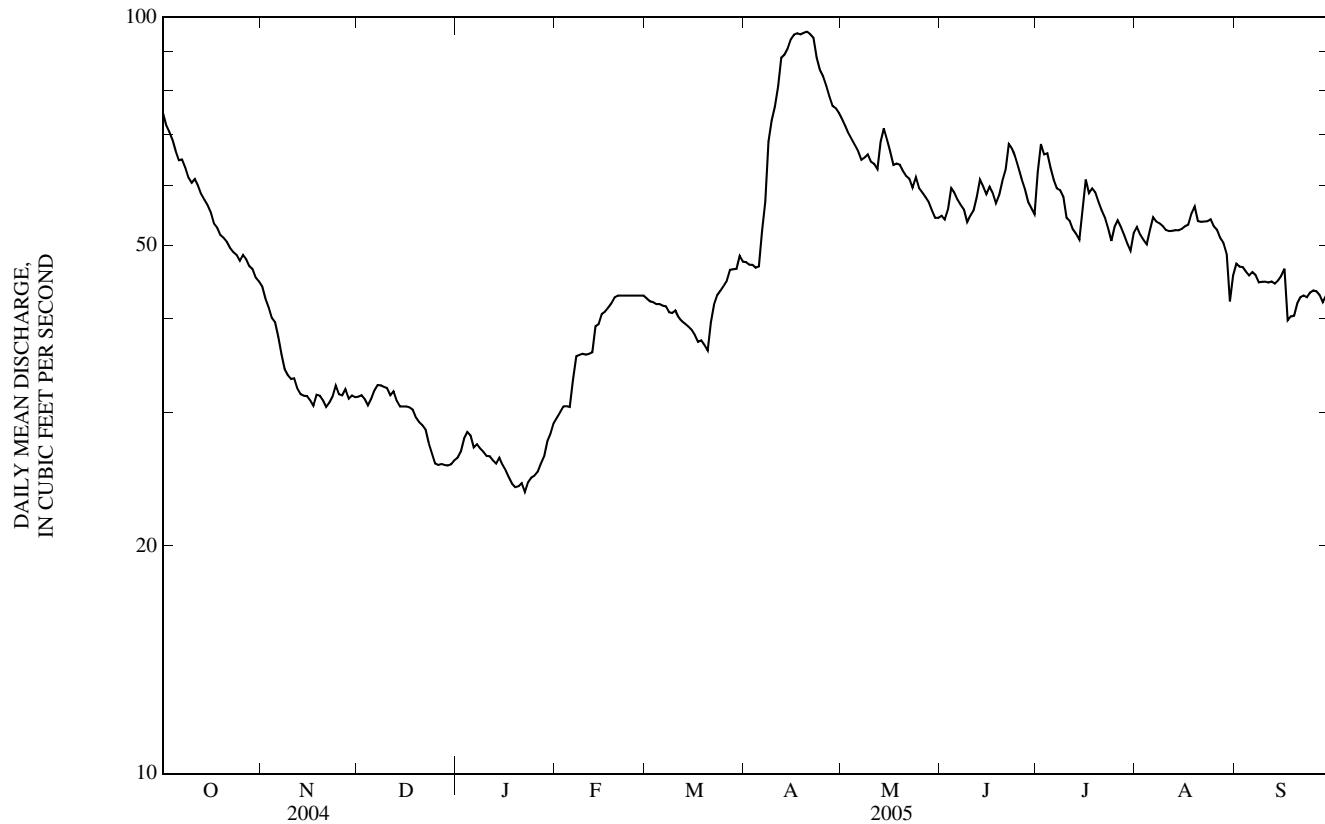
MEAN	299	153	121	70.4	128	170	310	357	550	451	454	370
MAX (WY)	3,004	2,139	1,682	428	1,254	1,341	2,310	2,639	2,932	3,660	3,716	3,376
(1952)	(1974)	(1974)	(1974)	(1993)	(1973)	(1973)	(1960)	(1987)	(1995)	(1951)	(1993)	(1951)
MIN (WY)	11.7	12.8	8.62	7.65	6.96	5.84	8.47	8.79	14.7	21.9	22.0	16.4
(1948)	(1992)	(1992)	(1992)	(1992)	(1992)	(1989)	(1989)	(1989)	(1989)	(1989)	(1943)	(1980)

KANSAS RIVER BASIN

06865500 SMOKY HILL RIVER NEAR LANGLEY, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1941 - 2005
ANNUAL MEAN	74.6	48.2	287
HIGHEST ANNUAL MEAN			1,392
LOWEST ANNUAL MEAN			23.6
HIGHEST DAILY MEAN	251	Aug 14	16,300
LOWEST DAILY MEAN	24	Feb 17	0.40
ANNUAL SEVEN-DAY MINIMUM	25	Feb 11	0.59
MAXIMUM PEAK FLOW		99	21,800
MAXIMUM PEAK STAGE		3.94	32.20
INSTANTANEOUS LOW FLOW		23	0.40
ANNUAL RUNOFF (AC-FT)	54,170	34,900	207,700
10 PERCENT EXCEEDS	177	68	722
50 PERCENT EXCEEDS	58	47	75
90 PERCENT EXCEEDS	28	28	24

e Estimated



KANSAS RIVER BASIN

101

06866500 SMOKY HILL RIVER NEAR MENTOR, KS

LOCATION.--Lat 38°42'40", long 97°34'17", in NW 1/4 NE 1/4 NW 1/4 sec.32, T.15 S., R.2 W., Saline County, Hydrologic Unit 10260008, on right bank at upstream side of State highway bridge, 2.0 mi southeast of Mentor, and at mile 114.0.

DRAINAGE AREA.--8,340 mi².

PERIOD OF RECORD.--December 1923 to October 1930, May 1931 to June 1932, October 1947 to current year. Published as "near Salina" 1948-49.

REVISED RECORDS.--WSP 1440: 1924, 1927-28, 1929(M), 1932(M). WSP 1919: 1960.

GAGE.--Water-stage recorder. Elevation of gage is 1,240.11 ft above NGVD of 1929. Prior to June 30, 1932, nonrecording gage at site 10 mi upstream at datum 20.9 ft higher. Oct. 1, 1947, to Sept. 18, 1948, nonrecording gage, and Sept. 19, 1948, to June 26, 1959, water-stage recorder at site 0.3 mi west on former channel, at present datum. June 27, 1959, to Sept. 8, 1959, nonrecording gage at present site and datum. Sept. 9, 1959, to Mar. 6, 2002, water-stage recorder at site 11.8 mi downstream at different datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Considerable regulation since 1948 by Kanopolis Lake (station 06865000), 82.0 mi upstream. Diversions upstream from station for irrigation. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest known flood at Salina, 7.5 mi downstream occurred in 1844; second greatest known flood, May 29, 1903, reached a stage of 26.5 ft near Mentor, from floodmarks, site and datum of 1923-32.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	65	54	41	52	49	60	88	112	56	21	42
2	76	65	54	39	49	50	62	83	188	57	21	40
3	76	61	e52	e30	45	52	62	82	963	52	24	43
4	77	62	52	e25	44	52	61	80	1,040	66	22	42
5	72	62	50	17	43	52	60	78	634	72	21	41
6	72	61	51	29	e45	53	102	76	295	65	22	40
7	73	59	50	33	e40	54	90	74	161	62	19	40
8	74	58	49	37	e35	50	90	74	116	58	24	40
9	72	57	47	42	e30	50	98	75	93	52	29	40
10	70	60	47	48	e40	49	87	77	88	48	21	37
11	74	61	46	47	e50	51	127	74	93	45	18	36
12	74	59	45	50	e60	53	106	75	448	40	25	37
13	71	56	45	e45	e80	51	106	560	401	36	89	37
14	64	55	43	e40	96	49	128	1,060	475	61	68	37
15	63	55	e45	e35	92	48	111	327	259	51	45	41
16	62	57	45	e30	67	48	102	183	155	41	44	44
17	60	58	47	30	57	48	98	121	129	41	43	44
18	60	59	43	38	54	47	96	100	134	44	39	41
19	59	57	41	43	55	47	97	e88	109	48	40	40
20	61	53	49	52	57	48	95	e81	94	48	61	37
21	64	50	45	58	57	157	93	e74	88	42	78	35
22	68	50	39	e59	54	380	89	e69	86	36	72	34
23	67	53	27	e60	54	369	88	e78	100	31	193	32
24	65	57	29	64	53	176	89	e137	200	27	71	32
25	64	57	29	57	54	107	90	e204	119	27	90	32
26	75	57	33	54	54	84	90	e255	87	32	470	31
27	85	57	e30	e50	54	74	89	e145	76	33	184	31
28	77	53	e35	e40	51	70	87	100	68	31	108	32
29	72	53	e35	e40	---	68	87	86	58	31	60	31
30	67	54	e40	e40	---	66	89	78	56	24	51	31
31	64	---	e40	e50	---	61	---	79	---	21	46	---
MEAN	69.5	57.4	43.1	42.7	54.4	84.3	91.0	154	231	44.5	68.4	37.3
MAX	85	65	54	64	96	380	128	1,060	1,040	72	470	44
MIN	59	50	27	17	30	47	60	69	56	21	18	31
AC-FT	4,280	3,410	2,650	2,620	3,020	5,180	5,410	9,440	13,740	2,730	4,200	2,220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2005, BY WATER YEAR (WY)

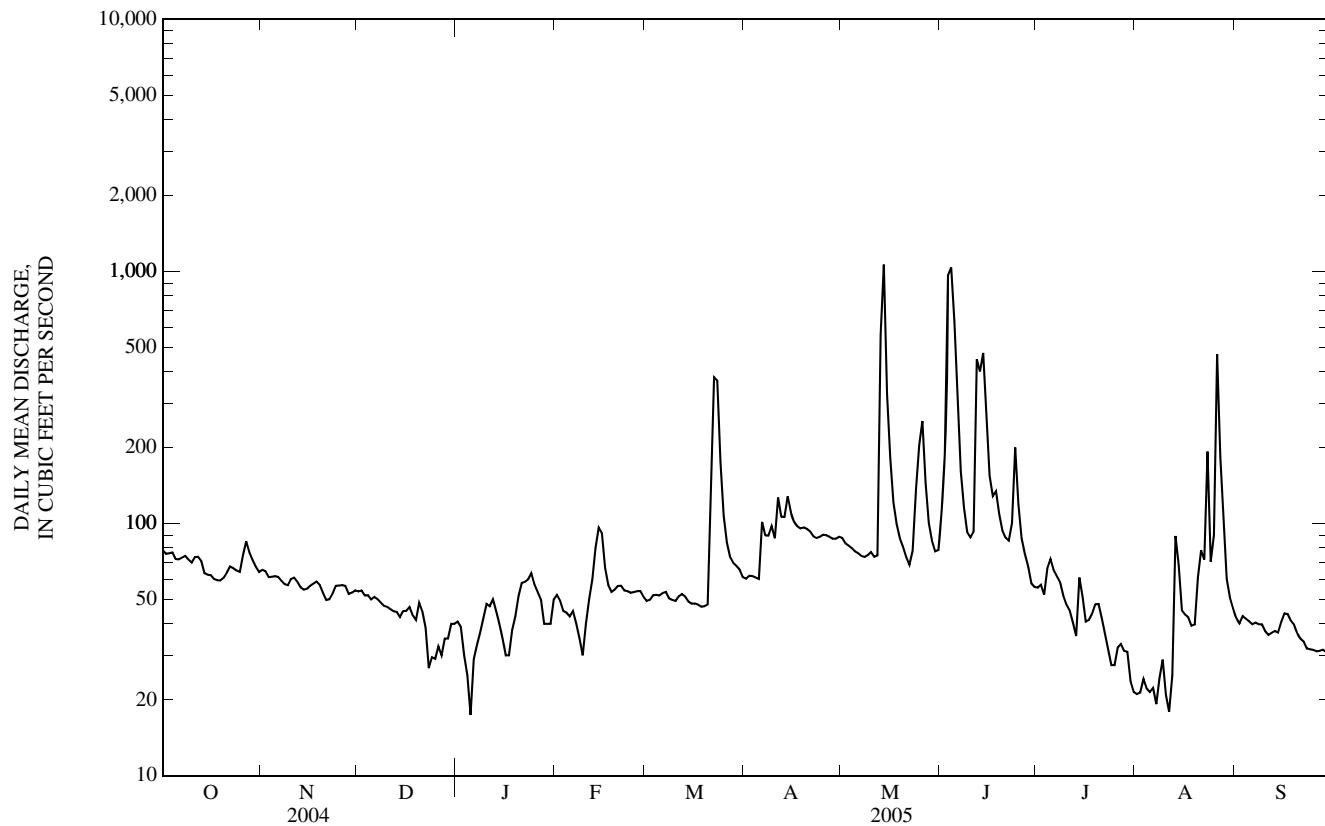
MEAN	345	213	165	120	197	309	385	491	686	573	586	435
(WY)	(1952)	(1974)	(1974)	(1974)	(1993)	(1973)	(1973)	(1987)	(1995)	(1951)	(1993)	(1951)
MAX	3,093	2,063	1,942	621	1,459	2,671	2,756	2,873	3,590	5,417	4,226	3,414
(WY)	(1992)	(1992)	(1992)	(1992)	(1992)	(1992)	(1989)	(1992)	(1988)	(1968)	(1989)	(1991)
MIN	20.5	22.1	13.0	14.3	20.3	16.0	17.1	22.2	52.5	27.9	12.6	35.5
(WY)	(1992)	(1992)	(1992)	(1992)	(1992)	(1992)	(1989)	(1992)	(1988)	(1968)	(1989)	(1991)

KANSAS RIVER BASIN

06866500 SMOKY HILL RIVER NEAR MENTOR, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1925 - 2005
ANNUAL MEAN	106	81.4	381
HIGHEST ANNUAL MEAN			1,781
LOWEST ANNUAL MEAN			35.6
HIGHEST DAILY MEAN	2,630	Mar 5	18,500
LOWEST DAILY MEAN	27	Dec 23	1.4
ANNUAL SEVEN-DAY MINIMUM	31	Dec 23	2.3
MAXIMUM PEAK FLOW		2,070	25,500
MAXIMUM PEAK STAGE		12.51	26.20
INSTANTANEOUS LOW FLOW		10	1.0
ANNUAL RUNOFF (AC-FT)	77,040	58,920	275,700
10 PERCENT EXCEEDS	167	110	963
50 PERCENT EXCEEDS	76	57	125
90 PERCENT EXCEEDS	39	32	40

e Estimated



KANSAS RIVER BASIN

103

06866900 SALINE RIVER NEAR WAKEENEY, KS

LOCATION--Lat 39°06'22", long 99°52'11", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.10, T.11 S., R.23 W., Trego County, Hydrologic Unit 10260009, on left bank at downstream side of bridge on U.S. Highway 283, 1 mi upstream from Trego Creek, and 5 mi north of WaKeeney.

DRAINAGE AREA.--696 mi².

PERIOD OF RECORD.--October 1955 to September 1966, October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,217.46 ft above NGVD of 1929. Oct. 1, 1955, to May 22, 1958, wire-weight and crest-stage gages and May 23, 1958, to Sept. 30, 1966, water-stage recorder at same site and datum.

REMARKS.--Records poor. Natural flow affected by ground-water withdrawals, diversion for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1879, about 27 ft in July 1950, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.01	0.16	0.27	0.12	0.89	1.3	0.46	0.00	0.00	0.00
2	0.00	0.00	0.01	0.14	0.22	0.12	1.0	1.2	0.41	0.00	0.00	0.00
3	0.00	0.00	0.01	e0.12	0.20	0.11	0.84	1.2	0.46	0.00	0.00	0.00
4	0.00	0.00	0.01	e0.11	0.18	0.10	0.72	1.3	0.51	0.02	0.00	0.00
5	0.00	0.00	0.01	e0.08	0.19	0.10	0.63	1.1	1.1	0.00	0.00	0.00
6	0.00	0.00	0.02	e0.08	0.66	0.10	1.0	1.2	6.6	0.00	0.00	0.00
7	0.00	0.00	0.02	e0.09	0.57	0.12	0.72	1.1	3.2	0.00	0.00	0.00
8	0.00	0.00	0.02	e0.12	0.40	0.11	0.69	1.1	1.9	0.00	0.00	0.00
9	0.00	0.00	0.02	e0.12	0.32	0.11	0.70	0.80	7.7	0.00	0.00	0.00
10	0.00	0.00	0.02	e0.10	0.29	0.10	0.82	0.64	12	0.00	0.00	0.00
11	0.00	0.00	0.03	e0.10	0.28	0.10	1.2	0.42	1.4	0.00	0.00	0.00
12	0.00	0.00	0.03	e0.12	0.26	0.10	2.3	0.38	0.79	0.00	0.00	0.00
13	0.00	0.00	0.02	e0.11	0.36	0.09	1.6	0.34	0.69	0.00	0.00	0.00
14	0.00	0.00	0.02	e0.09	0.22	0.10	1.4	0.26	0.46	0.00	0.00	0.00
15	0.00	0.00	0.03	e0.09	0.21	0.11	1.1	0.22	0.43	0.00	0.00	0.00
16	0.00	0.00	0.03	e0.09	0.18	0.12	1.0	0.16	0.92	0.00	0.00	0.00
17	0.00	0.00	0.03	0.13	0.15	0.12	0.97	0.17	6.9	0.00	0.00	0.00
18	0.00	0.00	0.04	0.19	0.10	0.09	1.0	0.16	3.7	0.00	0.00	0.00
19	0.00	0.00	0.04	0.40	0.13	0.09	0.95	0.11	2.1	0.00	0.00	0.00
20	0.00	0.00	0.05	1.6	0.16	0.13	0.89	0.06	1.3	0.00	0.00	0.00
21	0.00	0.00	0.04	2.2	0.13	9.4	0.77	0.03	1.3	0.00	0.00	0.00
22	0.00	0.00	0.04	1.0	0.10	6.6	0.62	0.02	1.4	0.00	0.00	0.00
23	0.00	0.00	0.04	0.54	0.11	5.5	0.58	0.02	1.3	0.00	0.00	0.00
24	0.00	0.00	0.02	0.55	0.11	3.4	0.68	0.07	0.70	0.00	0.00	0.00
25	0.00	0.00	0.06	0.52	0.12	2.1	0.93	0.21	0.37	0.00	0.00	0.00
26	0.00	0.00	0.09	0.41	0.13	1.5	0.96	0.18	0.24	0.00	0.00	0.00
27	0.00	0.00	0.12	0.36	0.13	1.1	0.81	0.13	0.13	0.00	0.00	0.00
28	0.00	0.00	0.14	0.33	0.13	0.65	0.97	0.07	0.05	0.00	0.00	0.00
29	0.00	0.00	0.19	0.31	---	0.69	1.1	0.06	0.02	0.00	0.00	0.00
30	0.00	0.01	0.35	0.30	---	1.0	1.2	0.33	0.01	0.00	0.00	0.00
31	0.00	---	0.16	0.30	---	0.60	---	0.51	---	0.00	0.00	---
MEAN	0.00	0.00	0.06	0.35	0.23	1.12	0.97	0.48	1.95	0.00	0.00	0.00
MAX	0.00	0.01	0.35	2.2	0.66	9.4	2.3	1.3	12	0.02	0.00	0.00
MIN	0.00	0.00	0.01	0.08	0.10	0.09	0.58	0.02	0.01	0.00	0.00	0.00
AC-FT	0.00	0.02	3.4	22	13	69	58	29	116	0.04	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2005, BY WATER YEAR (WY)

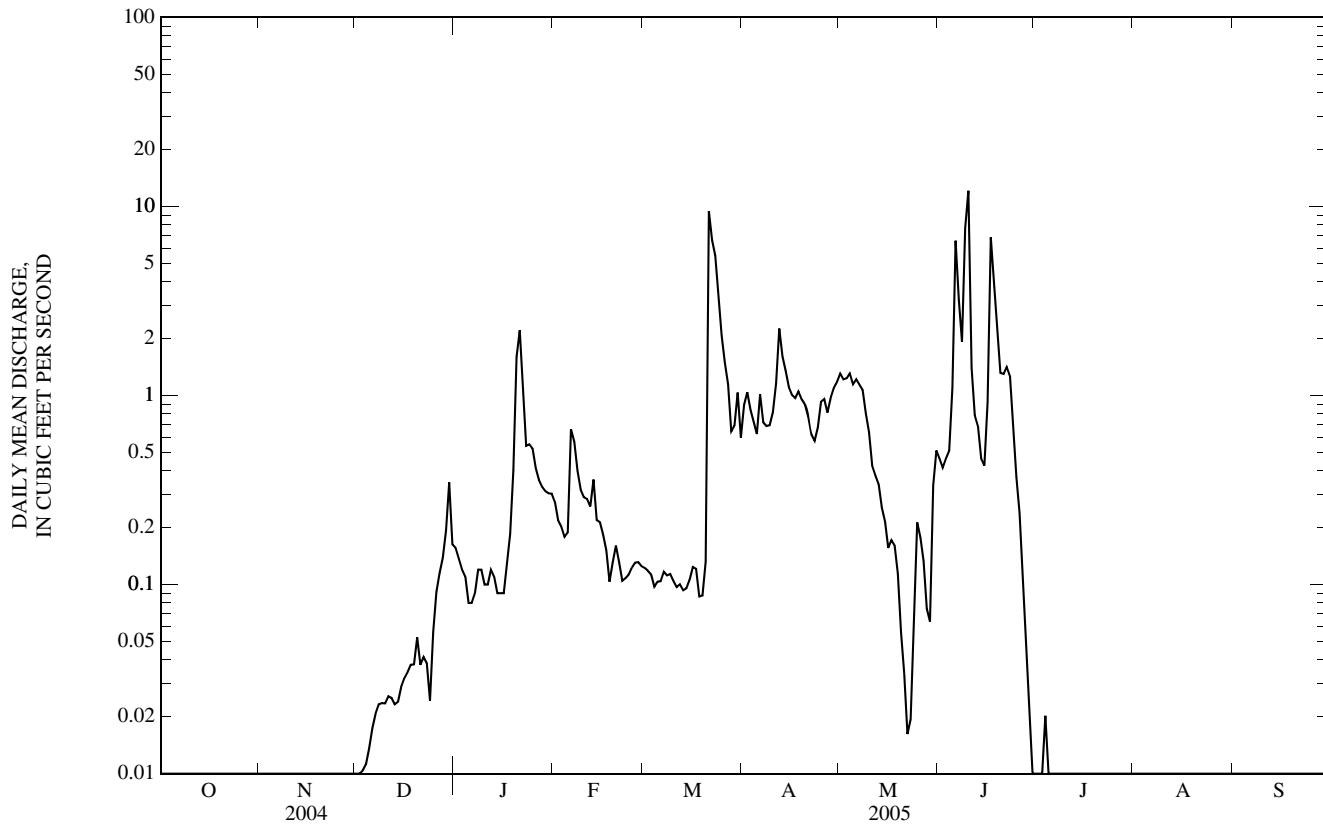
MEAN	9.83	4.43	4.34	4.86	9.04	17.6	11.1	38.0	38.8	46.4	25.6	14.2
MAX	180	22.6	18.6	20.1	92.1	335	53.7	359	680	441	303	104
(WY)	(1966)	(1994)	(1994)	(1962)	(1966)	(1960)	(1998)	(1995)	(1957)	(1993)	(1961)	(1993)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1991)	(1991)	(1991)	(1991)	(1966)	(1991)	(1956)

KANSAS RIVER BASIN

06866900 SALINE RIVER NEAR WAKEENEY, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1956 - 2005	
ANNUAL MEAN		1.87		0.43		18.8
HIGHEST ANNUAL MEAN					98.8	1957
LOWEST ANNUAL MEAN					0.00	1991
HIGHEST DAILY MEAN	513	Jul 1	12	Jun 10	8,010	Jun 17, 1957
LOWEST DAILY MEAN	0.00	Mar 16	0.00	Oct 1	0.00	Oct 28, 1955
ANNUAL SEVEN-DAY MINIMUM	0.00	Mar 16	0.00	Oct 1	0.00	Aug 23, 1956
MAXIMUM PEAK FLOW			57	Jun 10	13,000	Jun 17, 1957
MAXIMUM PEAK STAGE			4.07	Jun 10	19.40	Jun 17, 1957
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	most years
ANNUAL RUNOFF (AC-FT)	1,360		310		13,600	
10 PERCENT EXCEEDS	0.37		1.1		22	
50 PERCENT EXCEEDS	0.01		0.05		1.8	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated



KANSAS RIVER BASIN

105

06867000 SALINE RIVER NEAR RUSSELL, KS

LOCATION.--Lat 38°57'57", long 98°51'15", in SW 1/4 SW 1/4 sec.35, T.12 S., R.14 W., Russell County, Hydrologic Unit 10260009, on left bank at downstream side of bridge on U.S. Highway 281, 2.0 mi downstream from Salt Creek, 5.0 mi north of Russell, and at mile 190.6.

DRAINAGE AREA.--1,502 mi².

PERIOD OF RECORD.--October 1945 to September 1953, June 1959 to current year.

REVISED RECORDS.--WSP 1919: 1960. WDR KS-92-1: 1988-89 (M), 1990-91 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,551.59 ft above NGVD of 1929. Prior to Jan. 22, 1946, nonrecording gage at same site and datum. April 24, 2004, to September 30, 2004, at a temporary location 0.5 mi upstream at a different datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Low flow partially regulated at times by irrigation. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 11	1000	*272	*5.95				No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.8	10	12	22	22	29	33	27	9.4	2.0	3.7
2	9.1	7.5	10	12	21	22	29	33	26	9.1	1.7	3.1
3	8.9	7.7	10	e11	21	22	28	32	30	8.3	1.6	2.9
4	8.8	7.8	10	e10	20	22	28	32	28	8.4	1.6	2.4
5	e8.7	7.9	10	e10	20	21	28	32	27	10	1.9	2.1
6	e20	8.0	10	e10	26	21	37	32	26	9.4	2.0	5.4
7	e14	8.0	10	e11	e27	20	75	33	25	8.1	2.1	5.5
8	e12	7.9	10	e12	e30	20	47	32	23	7.4	2.2	3.6
9	e10	8.1	10	e12	e32	20	39	31	22	6.7	1.9	2.7
10	e9.6	9.7	10	e12	e34	20	37	31	26	6.1	1.5	2.2
11	e11	9.5	9.7	e12	37	19	167	31	30	5.8	1.4	1.9
12	e9.8	8.8	9.7	e11	33	19	108	31	24	5.6	7.1	1.6
13	9.4	8.6	9.1	e12	39	19	66	31	23	5.8	8.3	1.4
14	9.1	8.5	8.8	e12	44	19	53	30	27	5.4	5.7	1.4
15	9.0	8.5	12	e11	37	19	48	29	32	4.9	4.6	2.5
16	9.0	8.4	9.9	e11	31	19	44	29	31	4.5	4.2	2.0
17	8.8	8.4	9.7	e10	29	19	42	28	31	3.7	4.0	1.7
18	8.8	10	9.7	e10	27	18	40	27	28	4.1	3.6	1.6
19	8.6	11	9.6	e10	27	18	39	26	24	6.1	3.2	1.5
20	8.6	10	9.7	e11	27	18	38	25	22	4.0	3.3	1.4
21	8.8	10	9.7	e12	26	24	36	25	25	3.1	4.0	1.2
22	e8.7	9.9	e9.6	e13	25	38	35	23	23	2.7	3.9	1.0
23	e8.6	9.8	e9.8	e15	24	55	33	22	19	2.4	3.0	1.2
24	e8.5	9.4	10	e18	24	42	33	23	17	2.1	4.9	1.2
25	e8.4	9.4	10	e20	24	37	34	23	16	2.3	5.0	1.1
26	e8.3	9.4	11	e22	23	36	35	22	15	5.3	6.6	0.94
27	8.2	9.6	11	e22	23	36	35	21	13	5.1	5.3	0.90
28	8.0	9.4	11	e22	22	36	34	21	12	4.5	5.3	0.89
29	8.0	e9.2	e11	e22	---	34	34	20	11	3.5	4.3	0.85
30	7.6	9.8	13	23	---	33	34	22	10	2.8	3.8	0.89
31	7.5	---	12	22	---	31	---	26	---	2.2	3.3	---
MEAN	9.48	8.93	10.2	14.0	27.7	25.8	45.5	27.6	23.1	5.45	3.65	2.03
MAX	20	11	13	23	44	55	167	33	32	10	8.3	5.5
MIN	7.5	7.5	8.8	10	20	18	28	20	10	2.1	1.4	0.85
AC-FT	583	532	627	859	1,540	1,580	2,710	1,700	1,370	335	225	121

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2005, BY WATER YEAR (WY)

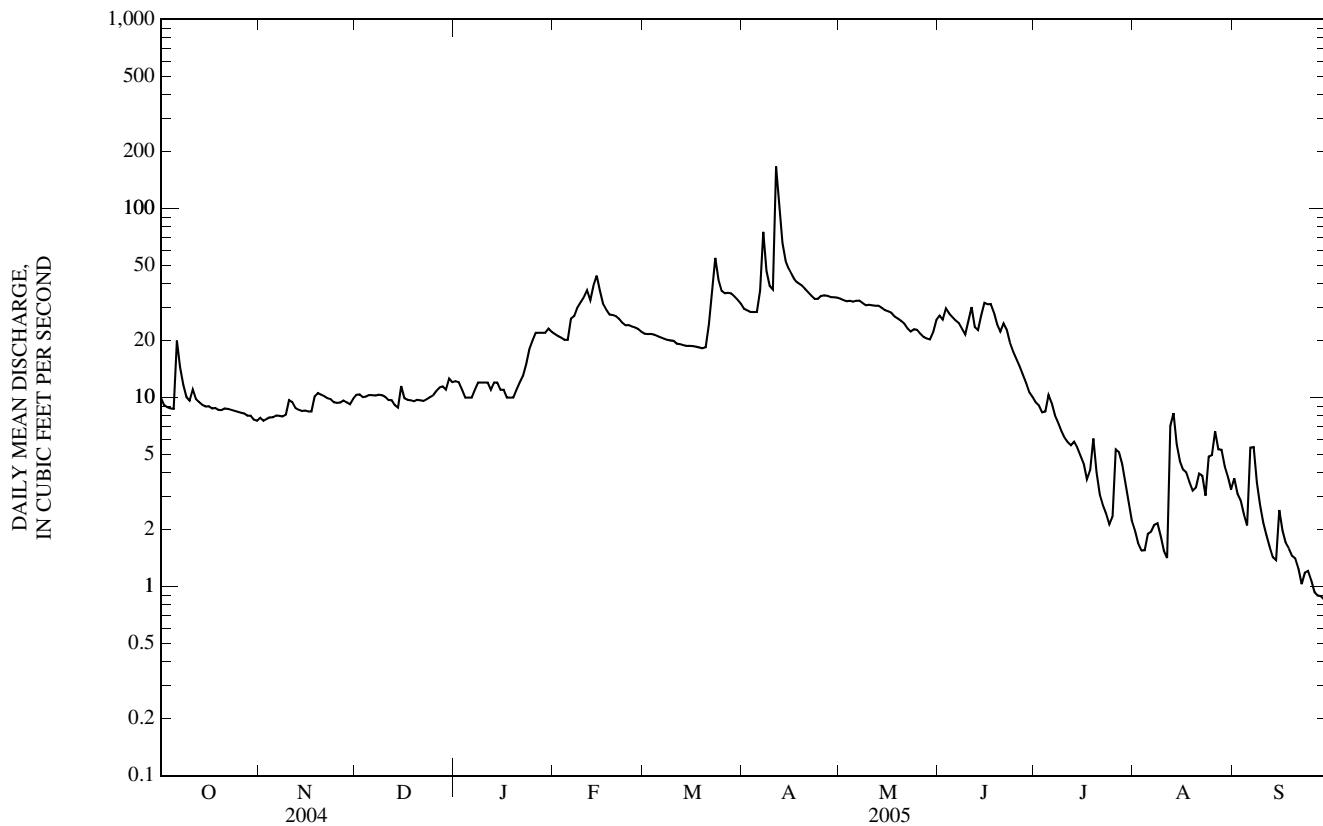
MEAN	62.0	41.2	33.7	34.7	56.2	82.6	97.9	131	188	199	113	70.8
(WY)	1,077	238	174	206	453	561	969	1,617	3,011	3,737	1,257	778
(1947)	(1997)	(1974)	(1974)	(1974)	(1949)	(1960)	(1987)	(1995)	(1951)	(1993)	(1950)	(1951)
MIN	1.05	0.96	1.92	2.28	1.97	2.49	3.29	4.06	8.82	1.69	1.29	0.94
(WY)	(1992)	(1991)	(1991)	(1992)	(1992)	(1992)	(1992)	(1992)	(1989)	(1991)	(2003)	(1991)

KANSAS RIVER BASIN

06867000 SALINE RIVER NEAR RUSSELL, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1946 - 2005
ANNUAL MEAN	32.9	16.8	93.3
HIGHEST ANNUAL MEAN			561
LOWEST ANNUAL MEAN			5.25
HIGHEST DAILY MEAN	1,690	May 11	23,400
LOWEST DAILY MEAN	4.5	Jun 14	0.10
ANNUAL SEVEN-DAY MINIMUM	4.9	Jan 1	0.27
MAXIMUM PEAK FLOW		272	41,500
MAXIMUM PEAK STAGE		5.95	25.73
INSTANTANEOUS LOW FLOW		0.74	0.00
ANNUAL RUNOFF (AC-FT)	23,870	12,180	67,580
10 PERCENT EXCEEDS	38	33	156
50 PERCENT EXCEEDS	9.9	11	30
90 PERCENT EXCEEDS	6.3	2.4	4.5

e Estimated



06868100 WILSON LAKE NEAR WILSON, KS

LOCATION.--Lat $38^{\circ}57'52''$, long $98^{\circ}29'33''$, in NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.36, T.12 S., R.11 W., Russell County, Hydrologic Unit 10260009, in the control tower near right end of Wilson Dam on the Saline River, 10 mi north of Wilson, and at mile 153.9.

DRAINAGE AREA.--1,917 mi².

PERIOD OF RECORD.--December 1964 to current year. Prior to October 1971, published as "Wilson Reservoir."

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Army Corps of Engineers).

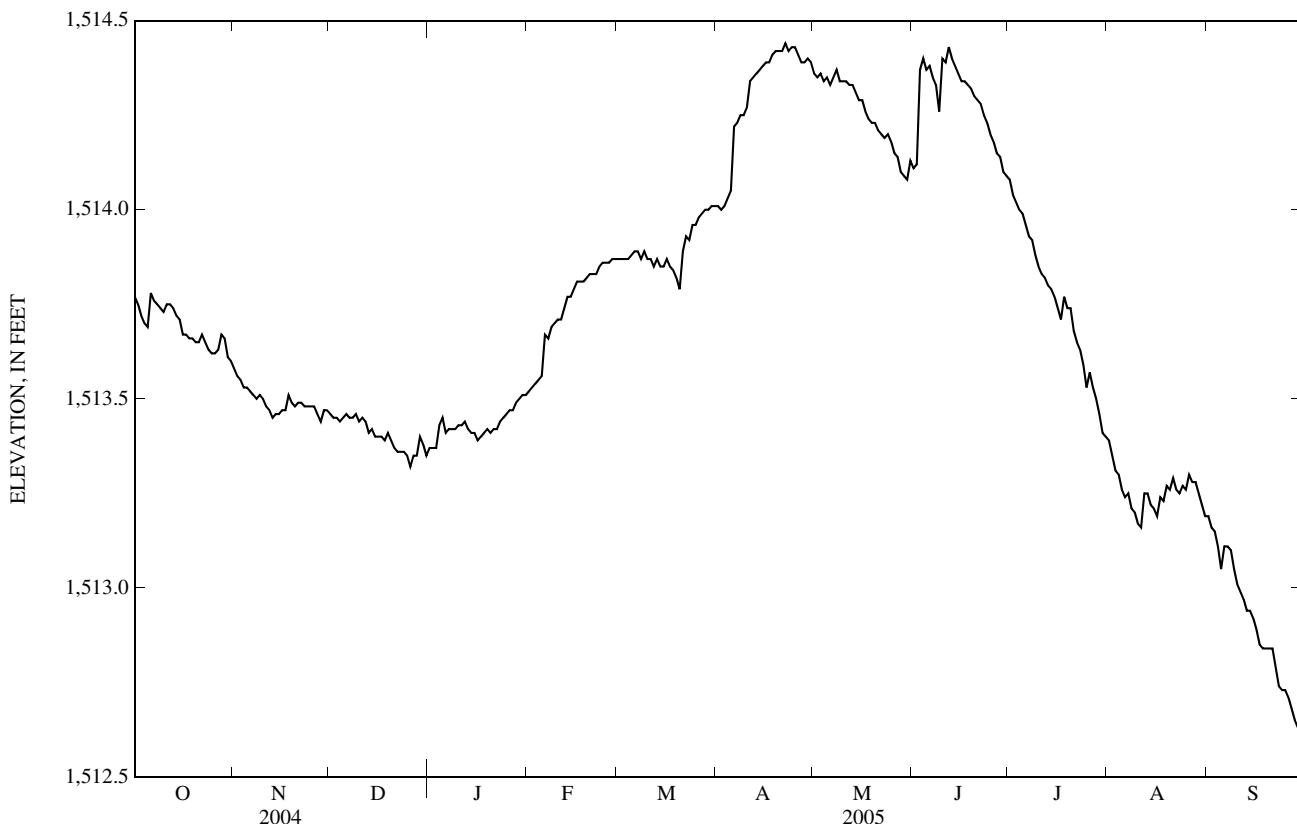
REMARKS.--Records good. Reservoir is formed by earthfill dam. Storage began Dec. 29, 1964. Total capacity, 1,667,000 acre-ft below elevation 1,587.5 ft, consisting of 1,420 acre-ft of dead storage below elevation 1,450 ft; conservation pool, 241,100 acre-ft between elevations 1,450 ft and 1,516 ft; flood-control pool, 1,245,000 acre-ft between elevations 1,516 ft and 1,582 ft, crest of spillway; and surcharge capacity of 179,500 acre-ft between elevations 1,582 ft and 1,587.5 ft. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,548.23 ft, Aug. 6, 1993, contents, 663,600 acre-ft; minimum elevation since conservation pool first filled, 1,493.59 ft, Dec. 26, 1966, contents, 91,500 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,514.55 ft, June 13, contents, 229,700 acre-ft; minimum elevation, 1,512.59 ft, Sept. 30, contents, 212,900 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on field survey by U.S. Army Corps of Engineers during July 1984)

Elevation	Contents	Elevation	Contents	Elevation	Contents
1,512	208,300	1,514	224,900	1,515	233,600
1,513	216,300				



KANSAS RIVER BASIN

06868100 WILSON LAKE NEAR WILSON, KS—Continued

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,513.77	1,513.58	1,513.46	1,513.37	1,513.52	1,513.87	1,514.01	1,514.36	1,514.11	1,514.08	e1,513.39	1,513.19
2	1,513.75	1,513.56	1,513.45	1,513.37	1,513.53	1,513.87	1,514.00	1,514.35	1,514.12	1,514.04	1,513.35	1,513.16
3	1,513.72	1,513.55	1,513.45	1,513.37	1,513.54	1,513.87	1,514.01	1,514.36	1,514.37	1,514.02	1,513.31	1,513.15
4	1,513.70	1,513.53	1,513.44	1,513.43	1,513.55	1,513.87	1,514.03	1,514.34	1,514.40	1,514.00	1,513.30	1,513.11
5	1,513.69	1,513.53	1,513.45	1,513.45	1,513.56	1,513.88	1,514.05	1,514.35	1,514.37	1,513.99	1,513.26	1,513.05
6	e1,513.78	1,513.52	1,513.46	1,513.41	1,513.67	1,513.89	1,514.22	1,514.33	1,514.38	1,513.96	1,513.24	1,513.11
7	1,513.76	1,513.51	1,513.45	1,513.42	1,513.66	1,513.89	1,514.23	1,514.35	1,514.35	1,513.93	1,513.25	1,513.11
8	1,513.75	1,513.50	1,513.45	1,513.42	1,513.69	1,513.87	1,514.25	1,514.37	1,514.33	1,513.92	1,513.21	1,513.10
9	1,513.74	1,513.51	1,513.46	1,513.42	1,513.70	1,513.89	1,514.25	1,514.34	1,514.26	1,513.88	1,513.20	1,513.05
10	1,513.73	1,513.50	1,513.44	1,513.43	1,513.71	1,513.87	1,514.27	1,514.34	1,514.40	1,513.85	1,513.17	1,513.01
11	1,513.75	1,513.48	1,513.45	1,513.43	1,513.71	1,513.87	1,514.34	1,514.34	1,514.39	1,513.83	1,513.16	1,512.99
12	1,513.75	1,513.47	1,513.44	1,513.44	1,513.74	1,513.85	1,514.35	1,514.33	1,514.43	1,513.82	1,513.25	1,512.97
13	1,513.74	1,513.45	1,513.41	1,513.42	1,513.77	1,513.87	1,514.36	1,514.33	1,514.40	1,513.80	1,513.25	1,512.94
14	1,513.72	1,513.46	1,513.42	1,513.41	1,513.77	1,513.85	1,514.37	1,514.31	1,514.38	1,513.79	1,513.22	1,512.94
15	1,513.71	1,513.46	1,513.40	1,513.41	1,513.79	1,513.85	1,514.38	1,514.29	e1,514.36	1,513.77	1,513.21	1,512.92
16	1,513.67	1,513.47	1,513.40	1,513.39	1,513.81	1,513.87	1,514.39	1,514.29	1,514.34	1,513.74	1,513.19	1,512.89
17	1,513.67	1,513.47	1,513.40	1,513.40	1,513.81	1,513.85	1,514.39	1,514.26	1,514.34	1,513.71	1,513.24	1,512.85
18	1,513.66	1,513.51	1,513.39	1,513.41	1,513.81	1,513.84	1,514.41	1,514.24	1,514.33	1,513.77	1,513.23	1,512.84
19	1,513.66	1,513.49	1,513.41	1,513.42	1,513.82	1,513.82	1,514.42	1,514.23	1,514.32	1,513.74	1,513.27	1,512.84
20	1,513.65	1,513.48	1,513.39	1,513.41	1,513.83	1,513.79	1,514.42	1,514.23	1,514.30	1,513.74	1,513.26	1,512.84
21	1,513.65	1,513.49	1,513.37	1,513.42	1,513.83	1,513.89	e1,514.42	1,514.21	1,514.29	1,513.68	1,513.29	1,512.84
22	1,513.67	1,513.49	1,513.36	1,513.42	1,513.83	1,513.93	1,514.44	1,514.20	1,514.28	1,513.65	1,513.26	1,512.79
23	1,513.65	1,513.48	1,513.36	1,513.44	1,513.85	1,513.92	1,514.42	1,514.19	1,514.25	1,513.63	1,513.25	1,512.74
24	1,513.63	1,513.48	1,513.36	1,513.45	1,513.86	1,513.96	1,514.43	1,514.20	1,514.23	1,513.59	1,513.27	1,512.73
25	1,513.62	1,513.48	1,513.35	1,513.46	1,513.86	1,513.96	1,514.43	1,514.18	1,514.20	1,513.53	1,513.26	1,512.73
26	1,513.62	1,513.48	1,513.32	1,513.47	1,513.86	1,513.98	1,514.41	1,514.15	1,514.18	1,513.57	1,513.30	1,512.71
27	1,513.63	1,513.46	1,513.35	1,513.47	1,513.87	1,513.99	1,514.39	1,514.14	1,514.15	1,513.53	1,513.28	1,512.68
28	1,513.67	1,513.44	1,513.35	1,513.49	1,513.87	1,514.00	1,514.39	1,514.10	1,514.14	1,513.50	1,513.28	1,512.65
29	1,513.66	1,513.47	1,513.40	1,513.50	---	1,514.00	1,514.40	1,514.09	1,514.10	1,513.46	1,513.25	1,512.63
30	1,513.61	1,513.47	1,513.38	1,513.51	---	1,514.01	1,514.39	1,514.08	1,514.09	1,513.41	1,513.22	1,512.60
31	1,513.60	---	1,513.35	1,513.51	---	1,514.01	---	1,514.13	---	1,513.40	1,513.19	---
MEAN	1,513.69	1,513.49	1,513.41	1,513.43	1,513.74	1,513.90	1,514.31	1,514.26	1,514.29	1,513.75	1,513.25	1,512.90
MAX	1,513.78	1,513.58	1,513.46	1,513.51	1,513.87	1,514.01	1,514.44	1,514.37	1,514.43	1,514.08	1,513.39	1,513.19
MIN	1,513.60	1,513.44	1,513.32	1,513.37	1,513.52	1,513.79	1,514.00	1,514.08	1,514.09	1,513.40	1,513.16	1,512.60
(+)	221,400	220,300	219,300	220,700	223,700	224,900	228,200	226,000	225,600	219,700	217,900	213,000
(#)	-1,800	-1,100	-1,000	+1,400	+3,000	+1,200	+3,300	-2,200	-400	-5,900	-1,800	-4,900

CAL YR 2004 (#) +4,700
WTR YR 2005 (#) -10,200

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

e Estimated

KANSAS RIVER BASIN

109

06868200 SALINE RIVER AT WILSON DAM, KS

LOCATION--Lat 38°58'29", long 98°29'24", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 12 S., R. 11 W., Russell County, Hydrologic Unit 10260010, on right bank 0.5 mi downstream from outlet of Wilson Dam, 9.0 mi upstream from Wolf Creek, 10 mi north of Wilson, and at mile 153.4.

DRAINAGE AREA.--1,917 mi².

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,427.31 ft above NGVD of 1929. Prior to May 12, 1965, water-stage recorder at site 1.5 mi downstream at different datum. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow completely regulated since 1964 by Wilson Lake (station 06868100), 0.5 mi upstream.

**DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	3.9	4.9	4.9	4.3	4.9	7.6	20	19	18	18	16
2	7.3	4.2	4.9	e4.8	4.1	4.9	11	20	19	17	18	16
3	7.3	5.6	4.9	e4.8	4.2	4.9	12	20	24	17	18	16
4	7.2	5.6	4.8	e4.8	4.2	5.0	15	19	19	17	18	16
5	5.3	6.9	4.9	e4.4	4.2	5.0	18	19	18	17	18	15
6	9.3	7.6	4.8	e4.6	4.8	5.0	20	19	18	17	18	16
7	12	7.4	6.0	4.7	8.6	4.2	19	19	18	17	18	16
8	11	7.4	6.6	4.7	12	2.1	19	19	19	17	18	16
9	11	7.3	6.5	4.7	11	1.1	19	19	18	17	17	16
10	12	7.5	3.3	e4.6	10	3.4	21	19	19	17	17	15
11	12	7.4	4.9	4.7	10	3.5	22	20	19	17	17	15
12	8.7	6.4	5.5	4.9	10	3.6	22	20	19	17	19	16
13	7.2	5.5	5.6	e4.8	11	3.5	21	20	19	17	17	16
14	7.3	5.5	5.5	e4.6	5.1	4.5	21	19	19	17	17	16
15	7.1	4.6	5.6	e4.2	3.8	5.1	21	19	16	17	17	16
16	6.9	4.5	5.7	e4.4	4.9	5.2	21	19	19	17	17	16
17	6.8	4.5	6.1	e4.4	4.9	5.1	20	19	20	17	19	16
18	6.8	4.8	6.5	e4.6	4.9	5.2	20	20	20	18	17	16
19	6.6	4.7	6.3	4.9	4.9	5.1	20	20	20	18	17	17
20	6.6	4.8	6.6	4.4	5.0	5.1	20	20	19	17	17	16
21	6.8	4.9	6.5	4.5	5.1	5.5	20	20	18	17	17	16
22	7.1	5.0	4.7	e4.4	5.1	5.3	21	20	17	18	17	17
23	7.4	4.6	e4.0	e4.4	5.2	5.1	20	20	17	17	17	17
24	6.9	4.9	e3.8	4.4	5.2	5.0	20	20	17	17	18	17
25	7.2	5.0	3.8	4.4	5.1	4.9	21	20	17	17	17	17
26	6.8	5.1	3.9	4.4	4.9	4.9	20	20	17	18	17	17
27	5.1	5.2	4.1	4.4	5.0	4.8	20	20	17	18	16	17
28	5.2	5.0	4.1	4.4	5.0	4.7	20	20	17	18	16	17
29	5.4	5.3	4.5	4.4	---	4.7	20	20	17	18	16	17
30	4.2	5.0	4.6	4.4	---	4.9	20	20	17	18	17	12
31	3.6	---	4.8	4.5	---	4.7	---	20	---	18	16	---
MEAN	7.49	5.54	5.12	4.56	6.16	4.55	19.1	19.6	18.4	17.3	17.3	16.1
MAX	12	7.6	6.6	4.9	12	5.5	22	20	24	18	19	17
MIN	3.6	3.9	3.3	4.2	3.8	1.1	7.6	19	16	17	16	12
AC-FT	461	329	315	281	342	279	1,130	1,210	1,090	1,070	1,060	956

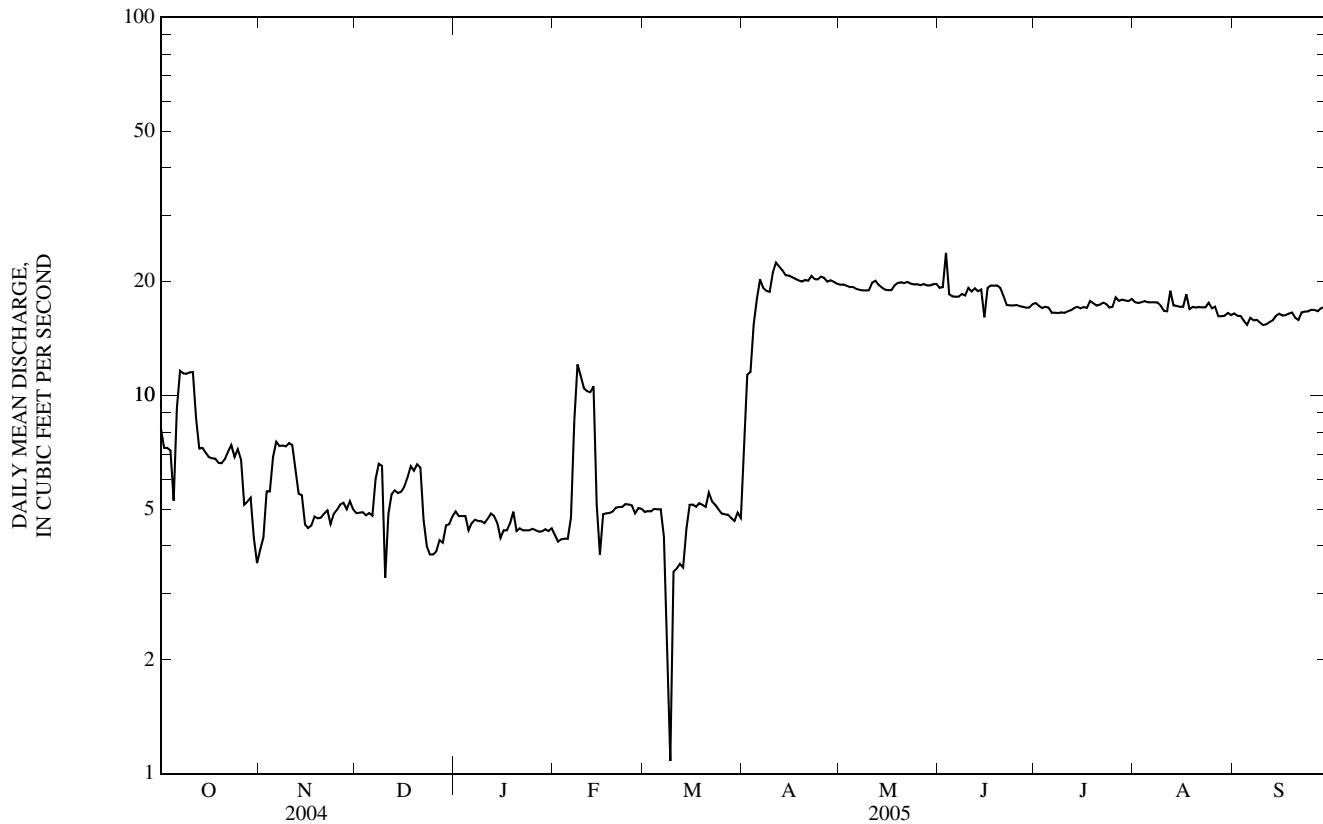
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2005, BY WATER YEAR (WY)

KANSAS RIVER BASIN

06868200 SALINE RIVER AT WILSON DAM, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1964 - 2005
ANNUAL MEAN	9.83	11.8	83.7
HIGHEST ANNUAL MEAN			641
LOWEST ANNUAL MEAN			5.36
HIGHEST DAILY MEAN	18	Jun 5	2,920
LOWEST DAILY MEAN	1.2	Mar 22	1.0
ANNUAL SEVEN-DAY MINIMUM	2.7	Mar 16	1.2
MAXIMUM PEAK FLOW		48	3,320
MAXIMUM PEAK STAGE		3.51	18.84
INSTANTANEOUS LOW FLOW		0.74	0.00
ANNUAL RUNOFF (AC-FT)	7,130	8,530	60,650
10 PERCENT EXCEEDS	15	20	173
50 PERCENT EXCEEDS	9.1	12	15
90 PERCENT EXCEEDS	4.3	4.4	4.9

e Estimated



KANSAS RIVER BASIN

111

06869500 SALINE RIVER AT TESCOTT, KS

LOCATION.--Lat 39°00'14", long 97°52'25", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.16, T.12 S., R.5 W., Ottawa County, Hydrologic Unit 10260010, on right bank at downstream side of county highway bridge, 0.5 mi south of Tescott, 0.5 mi upstream from Dry Creek, and at mile 68.5.

DRAINAGE AREA.--2,820 mi².

PERIOD OF RECORD.--September 1919 to current year.

REVISED RECORDS.--WSP 806: Drainage area. WSP 856: 1931. WSP 1310: 1926-28(M), 1935(M), 1945(M), 1947-48(M). WSP 1919: 1922, 1960.

GAGE.--Water-stage recorders. Datum of gage is 1,265.34 ft above NGVD of 1929. Prior to Nov. 23, 1934, nonrecording gage at present site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some diurnal fluctuation caused by powerplants upstream from station. Diversions upstream from station for irrigation. Flow moderately regulated since 1964 by Wilson Lake (station 06868100), 85.4 mi upstream. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 13, 1951, was greatest known since at least 1903 and exceeded the flood of May-June 1903 by about 1.0 ft, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e21	e13	e14	e21	e23	21	22	34	26	22	17	20
2	e19	e13	e14	e22	e22	20	21	34	29	22	16	18
3	e19	e13	e14	e22	e23	20	20	34	374	21	16	17
4	e19	e13	e14	e21	e21	20	20	33	2,290	21	16	16
5	e19	e13	e14	e19	e19	20	20	32	2,470	21	16	17
6	e18	e13	e15	e17	e20	20	31	32	1,000	20	16	17
7	e18	e12	e16	e17	e21	20	526	32	379	20	17	16
8	e18	e12	e16	e18	e24	20	476	32	194	19	16	16
9	e19	e12	e16	e20	e26	19	197	32	98	19	16	16
10	e18	e12	e16	e22	e24	19	209	32	69	19	16	16
11	e16	e12	e16	e22	e23	19	172	31	58	19	16	16
12	e16	e12	e16	e22	e26	19	164	30	60	19	16	16
13	e16	e12	e17	e22	e34	19	103	30	78	19	17	16
14	e16	e12	e17	e22	e57	18	71	31	78	19	18	15
15	e16	e12	e16	e21	58	17	59	32	64	19	18	16
16	e16	e12	e15	e20	40	17	53	34	59	18	20	15
17	e16	e12	e18	e20	32	18	49	31	50	18	20	15
18	e16	e12	e15	e20	28	18	46	30	42	18	19	15
19	e16	e12	e15	e20	27	18	43	29	38	19	18	15
20	e16	e12	e17	e21	29	19	41	28	34	21	18	15
21	e15	e13	e16	e22	27	22	39	28	32	21	18	15
22	e15	e12	e14	e27	25	23	37	27	31	20	20	15
23	e15	e12	e13	e34	23	36	36	27	32	19	20	14
24	e15	e13	e14	e32	22	44	35	26	28	17	20	14
25	e15	e13	e17	e30	21	36	34	26	27	16	67	14
26	e15	e13	e18	e29	21	30	34	26	26	17	89	14
27	e15	e14	e18	e30	21	26	35	25	24	17	42	14
28	e14	e14	e19	e31	21	25	36	25	23	17	61	14
29	e14	e14	e19	e28	---	24	35	25	22	17	36	13
30	e14	e14	e20	e26	---	23	34	25	22	17	44	13
31	e14	---	e21	e24	---	22	---	25	---	17	29	---
MEAN	16.4	12.6	16.1	23.3	27.1	22.3	89.9	29.6	259	19.0	25.4	15.4
MAX	21	14	21	34	58	44	526	34	2,470	22	89	20
MIN	14	12	13	17	19	17	20	25	22	16	16	13
AC-FT	1,010	750	992	1,430	1,500	1,370	5,350	1,820	15,390	1,170	1,560	918

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2005, BY WATER YEAR (WY)

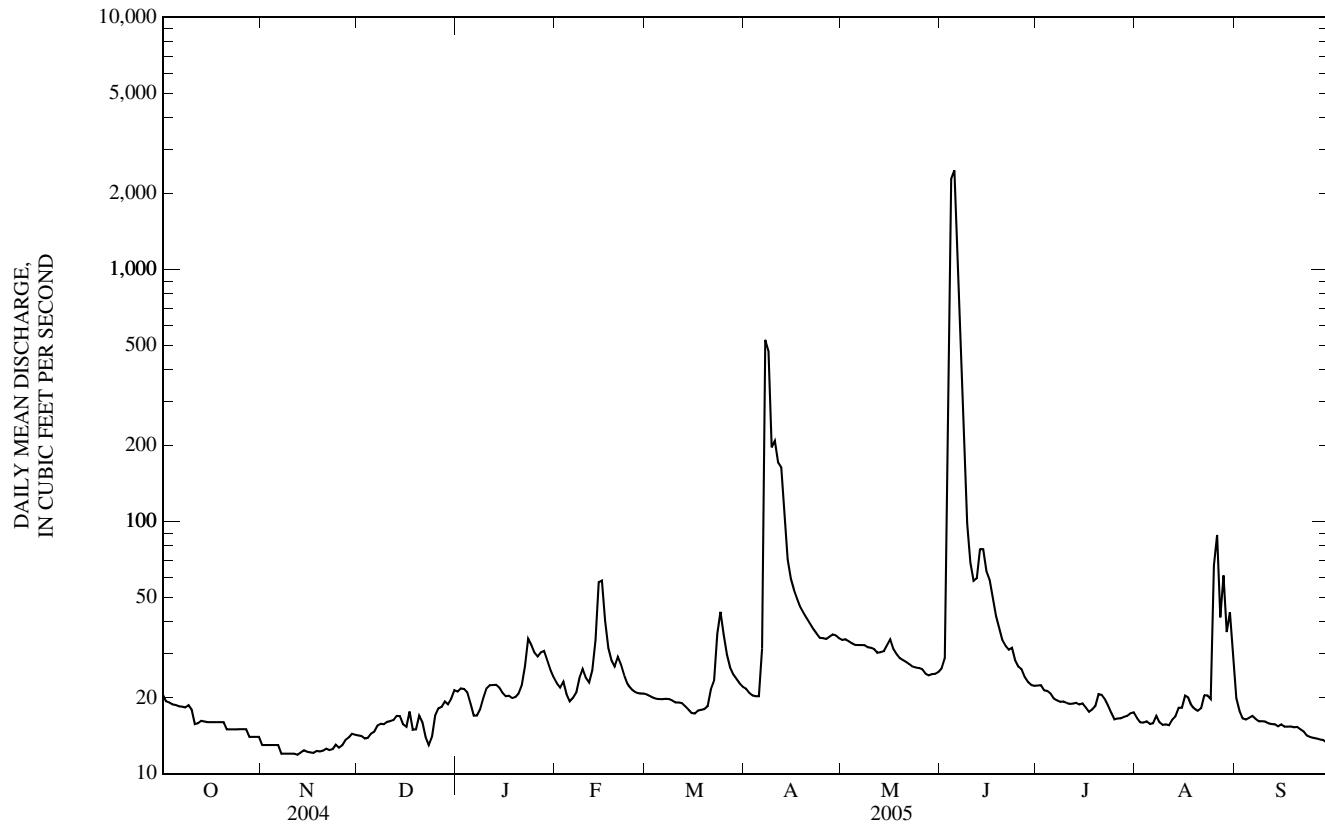
MEAN	140	98.0	92.1	88.1	112	159	224	351	492	413	248	222
MAX (WY)	1,650 (1994)	1,639 (1994)	1,736 (1994)	1,540 (1994)	984 (1974)	1,698 (1974)	2,445 (1960)	2,054 (1973)	6,756 (1961)	6,589 (1951)	2,363 (1951)	2,131 (1951)
MIN (WY)	4.77 (1925)	5.60 (1925)	6.16 (1935)	2.32 (1925)	12.5 (1938)	8.74 (1935)	10.5 (1968)	8.44 (1967)	12.2 (1966)	11.6 (1966)	7.13 (1924)	5.83 (1924)

KANSAS RIVER BASIN

06869500 SALINE RIVER AT TESCOTT, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1920 - 2005
ANNUAL MEAN	37.5	45.9	218
HIGHEST ANNUAL MEAN			1,590
LOWEST ANNUAL MEAN			19.8
HIGHEST DAILY MEAN	1,860	Jul 10	47,600
LOWEST DAILY MEAN	12	Jan 5	0.00
ANNUAL SEVEN-DAY MINIMUM	12	Nov 7	1.9
MAXIMUM PEAK FLOW		12	61,400
MAXIMUM PEAK STAGE		19.83	30.14
INSTANTANEOUS LOW FLOW		e10	0.00
ANNUAL RUNOFF (AC-FT)	27,250	33,270	157,800
10 PERCENT EXCEEDS	39	42	416
50 PERCENT EXCEEDS	21	20	56
90 PERCENT EXCEEDS	13	14	15

e Estimated



KANSAS RIVER BASIN

113

06869950 MULBERRY CREEK NEAR SALINA, KS

LOCATION.--Lat 38°50'40", long 97°40'05", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.9, T.14 S., R.3 W., Saline County, Hydrologic Unit 10260010, on left bank at downstream side of bridge on county highway bridge, 2.0 mi downstream from Spring Creek, 2.0 mi west of Salina, and at mile 9.0.

DRAINAGE AREA.--261 mi².

PERIOD OF RECORD.--Annual maximum, water years 1961-2001. March 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,208.48 ft above NGVD of 1929. Prior to Mar. 1, 2002, nonrecording gage at present site and datum.

REMARKS.--Records poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge 8,440 ft³/s, May 28, 1995 (gage height 27.14 ft) from nonrecording gage.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.05	0.11	0.14	1.0	3.9	2.4	4.2	2.3	0.76	0.17	0.02	0.03
2	0.04	0.11	0.14	1.1	4.2	2.4	4.0	2.1	2.1	0.10	0.02	0.03
3	0.04	0.11	0.15	1.1	3.9	2.3	3.8	2.0	182	0.06	0.02	0.02
4	0.04	0.11	0.15	1.1	3.8	2.5	3.7	2.0	376	0.04	0.02	0.02
5	0.04	0.11	0.31	1.1	4.0	2.5	3.7	2.1	68	0.03	0.03	0.01
6	0.05	0.11	0.80	1.0	5.2	2.5	33	2.2	19	0.03	0.03	0.01
7	0.06	0.12	1.1	1.1	e4.2	2.6	120	2.2	8.2	0.03	0.03	0.02
8	0.06	0.11	1.2	1.0	e4.4	2.4	46	2.2	5.0	0.03	0.03	0.02
9	0.06	0.12	1.1	1.0	e4.6	2.3	14	2.2	3.6	0.03	0.03	0.01
10	0.06	0.13	1.0	1.1	5.4	2.5	8.2	1.9	3.1	0.02	0.02	0.01
11	0.08	0.13	0.93	1.1	6.0	2.6	7.0	1.9	3.7	0.02	0.02	0.01
12	0.07	0.13	0.94	1.1	6.3	2.6	5.8	1.7	125	0.03	0.02	0.01
13	0.07	0.13	0.70	1.1	15	2.6	5.9	2.5	166	0.04	0.07	0.01
14	0.07	0.13	0.53	0.89	12	2.5	4.9	51	55	0.04	0.04	0.01
15	0.07	0.14	0.49	0.69	8.0	2.4	4.4	11	14	0.03	0.03	0.03
16	0.08	0.14	0.49	0.56	5.1	2.5	4.0	4.8	7.6	0.03	0.03	0.02
17	0.07	0.14	0.53	0.55	3.8	2.4	3.6	3.1	5.6	0.02	0.03	0.02
18	0.07	0.15	0.57	0.58	3.3	2.4	3.3	2.3	4.3	0.03	0.03	0.02
19	0.07	0.14	0.57	0.74	3.1	2.3	3.1	1.8	3.2	0.07	0.03	0.02
20	0.08	0.13	0.63	1.2	3.0	2.4	3.0	1.6	2.3	0.06	0.03	0.02
21	0.08	0.12	0.66	6.5	2.9	4.8	2.8	1.2	1.6	0.04	0.03	0.02
22	0.08	0.12	0.63	6.6	3.0	19	2.4	0.91	22	0.03	0.03	0.01
23	0.08	0.12	0.57	4.6	2.9	26	2.1	0.75	24	0.03	0.07	0.01
24	0.07	0.14	0.46	4.9	2.7	13	2.0	0.60	5.4	0.02	0.06	0.01
25	0.08	0.13	0.47	4.0	2.6	9.5	1.9	0.54	2.7	0.02	0.06	0.02
26	0.13	0.14	0.55	3.9	2.6	7.7	2.3	0.44	1.7	0.03	24	0.01
27	0.12	0.14	0.68	3.5	2.6	6.8	2.4	0.35	1.2	0.03	6.0	0.00
28	0.12	0.13	0.80	3.4	2.5	6.1	2.5	0.36	0.87	0.03	1.3	0.00
29	0.13	0.15	0.98	3.7	---	5.5	2.4	0.26	0.50	0.03	0.72	0.01
30	0.12	0.15	0.96	3.7	---	5.1	2.3	0.15	0.30	0.02	0.33	0.01
31	0.11	---	1.0	3.8	---	4.5	---	0.22	---	0.02	0.11	---
MEAN	0.08	0.13	0.65	2.18	4.68	5.07	10.3	3.51	37.2	0.04	1.07	0.01
MAX	0.13	0.15	1.2	6.6	15	26	120	51	376	0.17	24	0.03
MIN	0.04	0.11	0.14	0.55	2.5	2.3	1.9	0.15	0.30	0.02	0.02	0.00
AC-FT	4.7	7.6	40	134	260	312	612	216	2,210	2.4	66	0.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

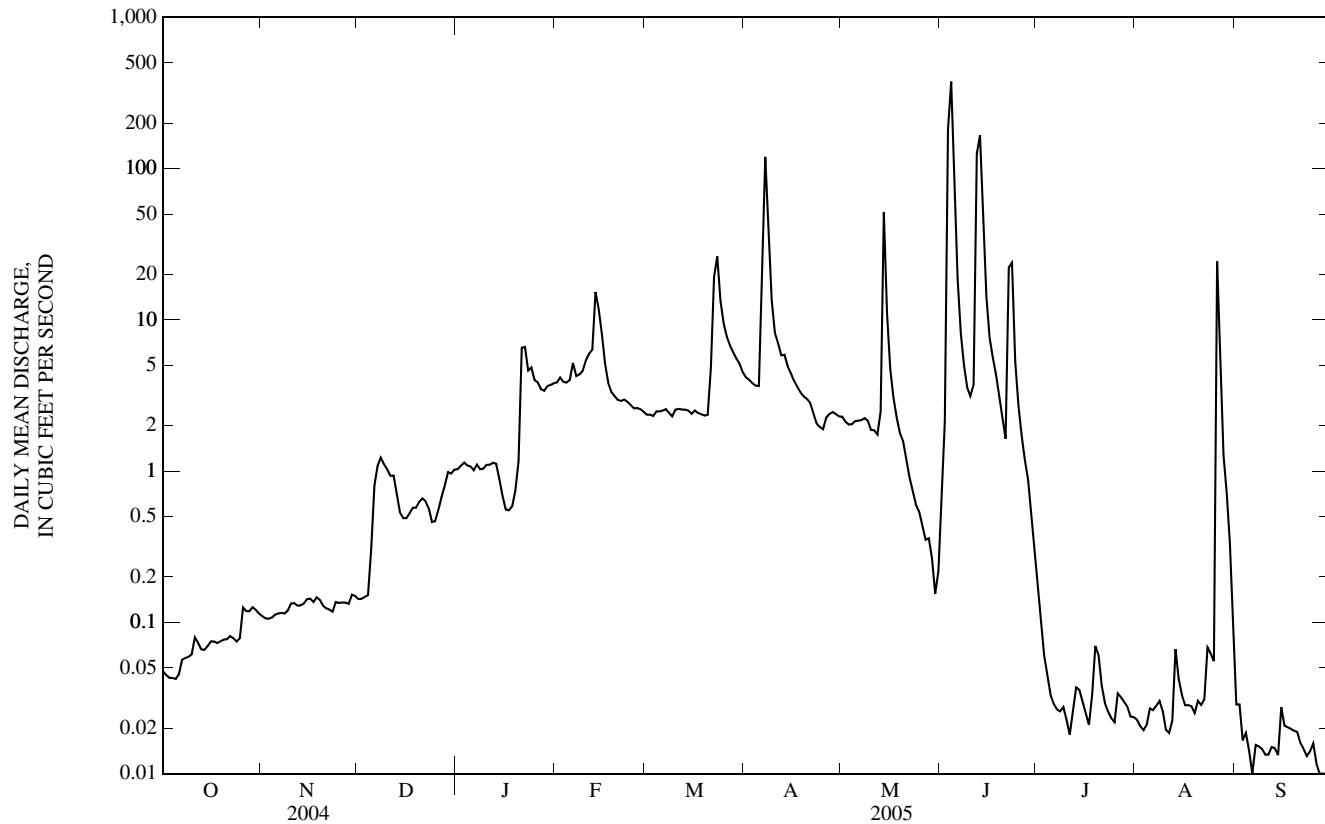
MEAN	3.22	0.64	1.32	2.09	4.00	15.6	9.88	8.19	15.7	2.88	0.49	1.28
(WY)	(2003)	(2003)	(2003)	(2003)	(2005)	(2004)	(2003)	(2004)	(2005)	(2004)	(2005)	(2003)
MAX	9.29	1.29	1.94	2.77	4.68	28.1	16.7	12.6	37.2	11.1	1.07	4.96
MIN	0.08	0.13	0.65	1.33	2.75	5.07	5.84	3.51	2.98	0.04	0.07	0.01
(WY)	(2005)	(2005)	(2005)	(2004)	(2004)	(2005)	(2004)	(2005)	(2002)	(2005)	(2004)	(2005)

KANSAS RIVER BASIN

06869950 MULBERRY CREEK NEAR SALINA, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 2002 - 2005
ANNUAL MEAN	5.96	5.34	6.22
HIGHEST ANNUAL MEAN			7.24
LOWEST ANNUAL MEAN			5.34
HIGHEST DAILY MEAN	377	Mar 5	377
LOWEST DAILY MEAN	0.03	Sep 4	0.00
ANNUAL SEVEN-DAY MINIMUM	0.03	Sep 10	0.01
MAXIMUM PEAK FLOW		673	673
MAXIMUM PEAK STAGE		9.19	9.19
INSTANTANEOUS LOW FLOW		0.00	0.00
ANNUAL RUNOFF (AC-FT)	4,320	3,870	4,500
10 PERCENT EXCEEDS	7.2	5.9	7.7
50 PERCENT EXCEEDS	1.2	0.70	1.5
90 PERCENT EXCEEDS	0.05	0.02	0.04

e Estimated



KANSAS RIVER BASIN

115

06870200 SMOKY HILL RIVER AT NEW CAMBRIA, KS

LOCATION.--Lat 38°51'50", long 97°28'59", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.14 S., R.2 W., Saline County, Hydrologic Unit 10260008, on left bank at downstream side of county highway bridge, 1.0 mi southeast of New Cambria, 10.1 mi upstream from Gypsum Creek, about 18.1 mi upstream from Solomon River, and at mile 86.6.

DRAINAGE AREA.--11,730 mi², approximately.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,160.19 ft above NGVD of 1929. Prior to Mar. 27, 1963, nonrecording gage and Mar. 27, 1963, to July 5, 1977, water-stage recorder at site 2.7 mi downstream at datum 2.23 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow moderately regulated since 1948 by Kanopolis Lake (station 06865000), 97.7 mi upstream, and slightly regulated since 1964 by Wilson Lake (station 06868100) and by numerous diversions upstream from station. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	63	66	70	77	61	101	144	164	93	34	116
2	85	62	63	61	73	60	97	141	167	89	33	115
3	82	63	61	63	67	59	97	133	906	88	31	99
4	86	61	62	e61	61	60	94	130	3,370	86	32	88
5	85	61	66	e53	64	59	90	128	3,520	93	33	81
6	76	61	73	e67	e60	59	317	125	2,890	95	32	75
7	83	61	69	59	e57	58	547	122	1,930	88	29	74
8	80	60	67	59	e49	58	529	118	910	83	29	73
9	78	59	64	64	e49	57	887	116	516	80	28	70
10	77	60	61	62	e60	56	560	115	362	74	32	68
11	83	66	61	65	62	54	419	116	305	69	30	65
12	82	61	61	66	86	56	421	114	397	67	48	62
13	77	60	60	65	171	55	347	132	1,650	62	273	61
14	76	59	59	45	266	55	315	1,070	1,170	57	258	60
15	73	61	55	e53	207	53	283	794	728	71	113	70
16	73	61	56	e58	159	53	229	342	408	68	68	68
17	73	63	61	e59	137	52	200	235	287	57	61	67
18	72	63	61	57	118	50	185	184	240	68	59	67
19	71	66	61	62	100	48	174	161	222	84	55	64
20	70	62	57	78	88	49	170	143	186	83	60	61
21	70	58	57	83	81	136	164	129	161	63	73	58
22	70	57	e58	74	75	437	155	120	155	56	116	55
23	69	56	e59	74	74	637	152	112	159	50	738	54
24	66	64	e61	108	75	483	149	110	186	49	481	54
25	64	67	63	77	97	267	152	164	215	44	351	52
26	72	68	58	58	68	206	152	238	158	51	712	50
27	80	68	58	62	66	177	150	289	132	55	1,330	49
28	83	66	56	72	65	152	148	184	121	47	472	50
29	76	67	55	69	---	135	145	142	109	42	247	49
30	67	67	71	70	---	118	144	123	99	40	156	49
31	64	---	75	74	---	107	---	122	---	37	142	---
MEAN	75.9	62.4	61.8	66.1	93.3	128	252	203	727	67.4	199	67.5
MAX	91	68	75	108	266	637	887	1,070	3,520	95	1,330	116
MIN	64	56	55	45	49	48	90	110	99	37	28	49
AC-FT	4,670	3,710	3,800	4,060	5,180	7,870	15,020	12,490	43,290	4,140	12,210	4,010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2005, BY WATER YEAR (WY)

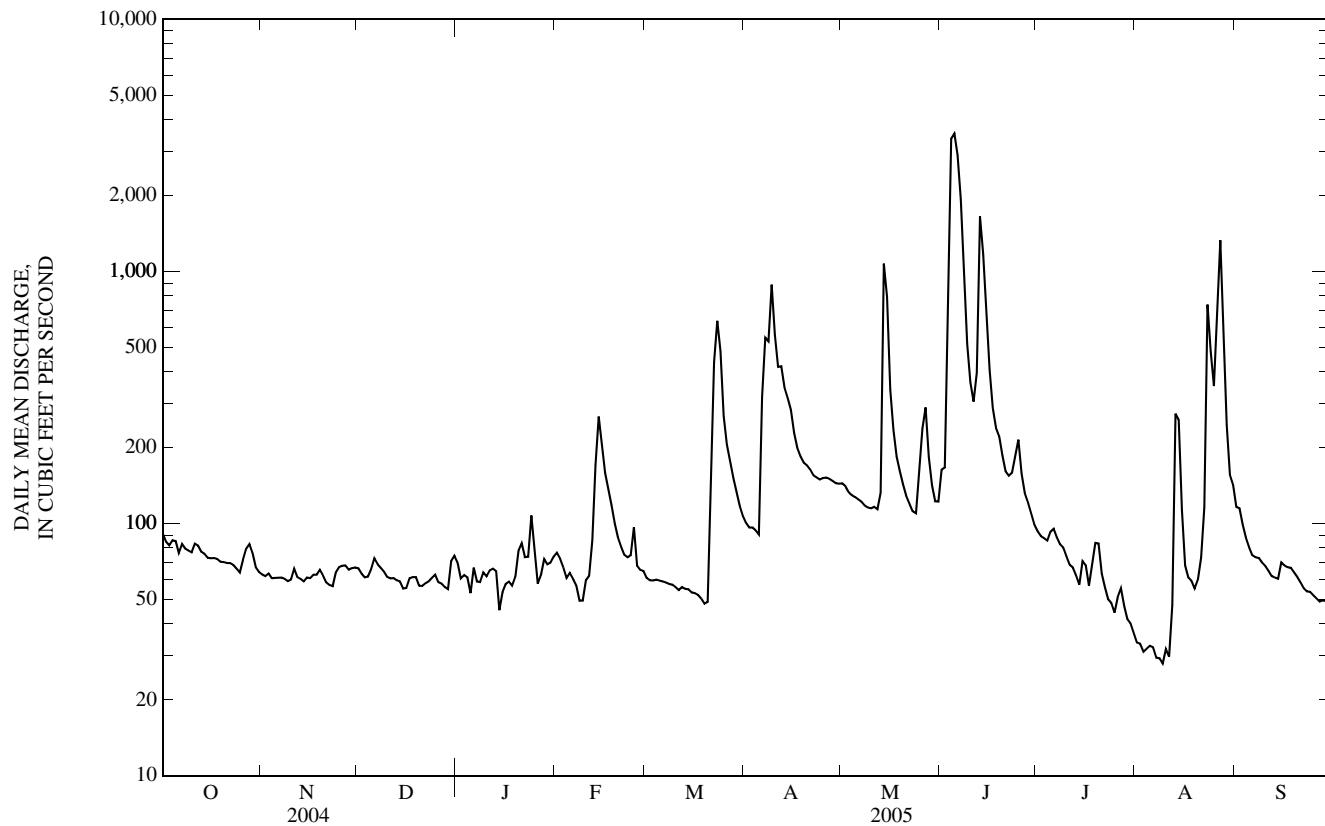
MEAN	477	381	347	268	419	662	812	995	1,082	965	677	582
MAX	6,168	3,087	3,293	2,071	2,850	4,789	6,506	5,331	5,360	12,190	5,796	4,601
(WY)	(1974)	(1974)	(1974)	(1994)	(1993)	(1973)	(1973)	(1995)	(1995)	(1993)	(1993)	(1993)
MIN	23.2	43.1	40.8	40.0	35.8	40.6	47.2	47.6	117	52.5	45.4	56.8
(WY)	(1992)	(1992)	(1992)	(1992)	(1992)	(1992)	(1992)	(1992)	(1988)	(1968)	(2003)	(2002)

KANSAS RIVER BASIN

06870200 SMOKY HILL RIVER AT NEW CAMBRIA, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1963 - 2005
ANNUAL MEAN	164	166	640
HIGHEST ANNUAL MEAN			3,609
LOWEST ANNUAL MEAN			117
HIGHEST DAILY MEAN	3,310	Mar 6	25,000
LOWEST DAILY MEAN	55	Dec 15	13
ANNUAL SEVEN-DAY MINIMUM	58	Dec 15	14
MAXIMUM PEAK FLOW		3,710	26,400
MAXIMUM PEAK STAGE		16.74	31.72
INSTANTANEOUS LOW FLOW		24	11
ANNUAL RUNOFF (AC-FT)	118,800	120,500	463,500
10 PERCENT EXCEEDS	247	288	1,690
50 PERCENT EXCEEDS	111	72	212
90 PERCENT EXCEEDS	61	53	68

e Estimated



KANSAS RIVER BASIN

117

06870300 GYPSUM CREEK NEAR GYPSUM, KS

LOCATION.--Lat 38°39'10", long 97°25'12", in SE ¼ SE ¼ SW ¼ sec.15, T.16 S., R.1 W., Saline County, Hydrologic Unit 10260008, on left bank at downstream side of highway bridge, 2.6 mi upstream from Stag Creek, 3.5 mi south of Gypsum, and at mile 22.7.

DRAINAGE AREA.--117 mi².

PERIOD OF RECORD.--October 1954 to September 1971. October 1971 to September 1990, flood hydrograph record. May 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,232.16 ft above NGVD of 1929. Prior to July 21, 1959, nonrecording and crest-stage gages at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are fair. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s, June 26, 1965 (gage height 20.71 ft). Maximum stage known since at least 1869, 22.2 ft, May 29, 1903; flood in April 1929 reached a stage of 21.9 ft, and that of July 11, 1951, a stage of 21.7 ft, from floodmark; information from newspapers and local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 650 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Mar 22	2015	709	13.44		Jun 3	2300	2,200	17.76
	May 13	1615	*2,270	*17.84		Jun 12	1845	1,040	15.72

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.67	3.8	8.7	5.7	9.9	7.0	21	13	151	8.1	1.7	3.9
2	0.58	4.4	8.4	5.0	9.1	7.4	20	12	107	8.6	1.6	5.2
3	0.61	4.4	8.8	e4.7	10	7.5	19	12	797	8.6	1.5	4.4
4	0.61	3.9	10	e4.7	8.4	7.2	19	12	1,140	14	1.4	3.5
5	0.57	3.8	9.4	e4.0	7.3	6.6	18	12	161	12	1.2	2.9
6	0.58	4.0	12	e3.2	e7.5	6.7	37	12	77	9.2	1.0	2.5
7	0.68	3.9	13	e3.7	e7.5	6.6	87	12	52	7.8	0.82	2.6
8	0.95	4.0	10	e4.0	e7.2	5.9	45	12	39	7.1	1.1	2.7
9	1.0	4.2	9.0	6.6	e8.2	5.5	31	15	33	6.7	0.95	2.4
10	1.0	4.4	7.6	7.3	e8.2	5.8	25	15	30	6.5	0.56	2.0
11	1.7	5.2	7.0	9.4	20	5.6	28	12	33	6.4	0.43	1.8
12	2.2	6.6	6.8	8.2	42	5.7	25	19	542	6.1	0.63	1.9
13	2.6	5.3	6.3	7.2	106	5.1	21	1,490	523	6.2	1.5	1.9
14	2.0	5.0	5.0	5.0	79	4.8	20	401	136	5.6	1.8	1.6
15	1.7	5.2	4.6	3.6	33	4.8	19	117	69	5.0	1.4	8.1
16	1.6	5.3	6.7	4.6	19	5.0	18	e70	49	5.1	1.3	7.3
17	1.7	6.4	5.5	4.3	14	5.1	17	e49	40	4.8	1.4	3.9
18	1.8	8.4	5.6	4.3	12	5.1	17	40	33	4.6	1.5	3.1
19	1.9	9.1	5.1	5.0	12	4.6	16	32	28	5.6	1.5	2.6
20	1.8	8.5	4.2	32	16	4.6	16	27	24	5.5	2.7	2.5
21	2.1	7.3	5.8	50	13	95	15	23	21	4.1	2.1	2.4
22	2.7	5.8	4.0	35	10	499	13	20	20	3.3	1.9	2.0
23	2.2	5.9	3.5	16	9.3	253	12	17	18	3.1	57	1.6
24	2.6	7.8	3.4	15	9.4	89	12	28	16	2.8	31	1.8
25	2.8	12	3.1	13	9.0	59	13	29	13	2.5	113	1.9
26	4.0	11	3.2	12	8.4	43	15	19	12	2.4	100	1.7
27	17	9.6	3.9	10	8.1	36	14	16	11	3.4	19	1.6
28	7.6	8.5	7.3	8.5	7.7	31	13	15	10	3.0	7.4	1.4
29	4.8	8.5	7.4	8.3	---	28	13	14	9.4	2.1	5.5	1.4
30	4.5	11	9.0	10	---	25	14	13	8.4	2.0	4.7	1.5
31	4.0	---	6.9	11	---	22	---	34	---	1.8	4.0	---
MEAN	2.60	6.44	6.81	10.4	18.3	41.8	21.8	84.3	140	5.61	12.0	2.80
MAX	17	12	13	50	106	499	87	1,490	1,140	14	113	8.1
MIN	0.57	3.8	3.1	3.2	7.2	4.6	12	12	8.4	1.8	0.43	1.4
AC-FT	160	383	419	637	1,010	2,570	1,300	5,180	8,340	345	737	167

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2005, BY WATER YEAR (WY)

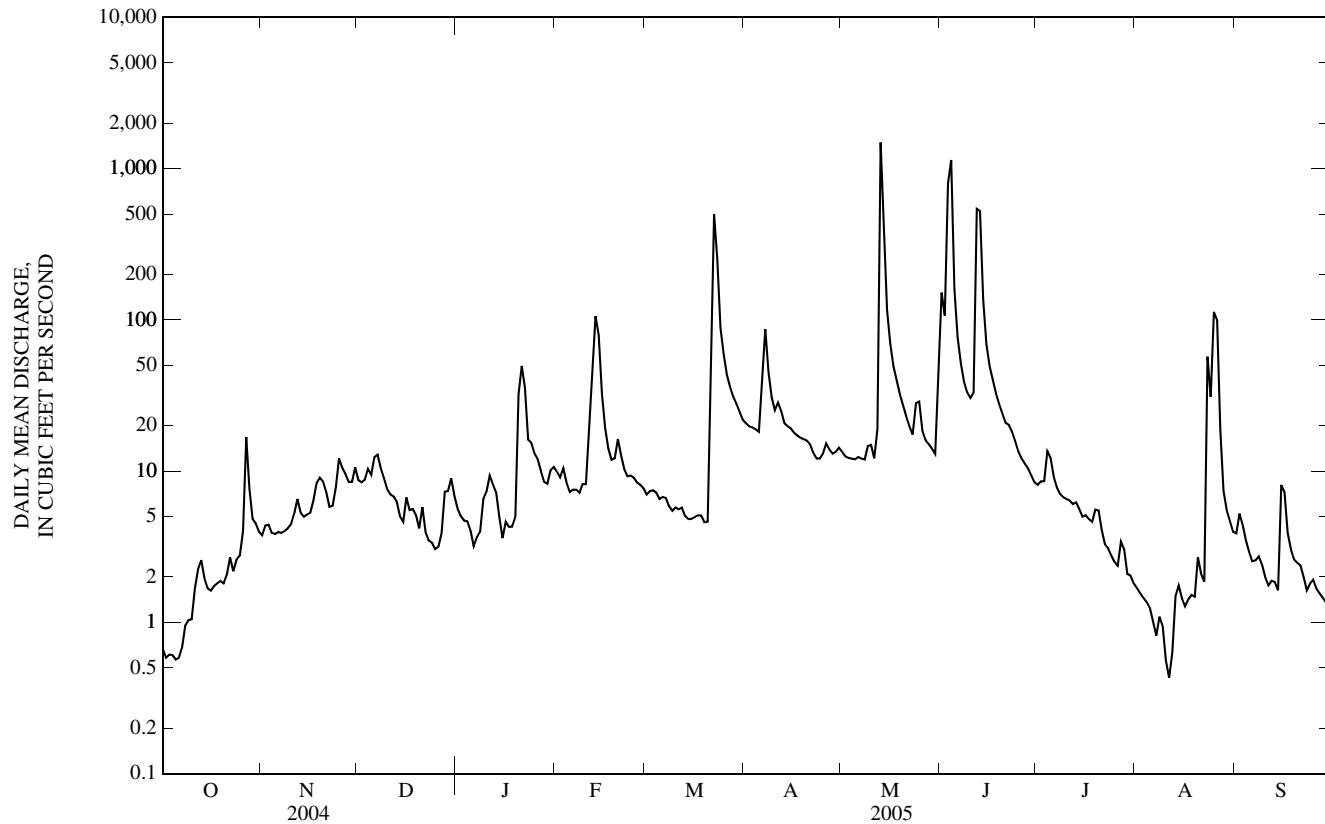
MEAN	14.3	8.23	7.98	11.4	16.5	34.6	36.3	55.9	62.1	23.6	5.71	22.4
MAX	89.3	30.8	25.0	58.9	57.1	123	145	359	331	101	22.3	237
(WY)	(1968)	(1968)	(1968)	(1962)	(2001)	(1960)	(1969)	(1969)	(1965)	(1969)	(2001)	(1967)
MIN	0.00	0.00	0.00	0.00	0.02	0.12	1.42	0.05	0.00	0.00	0.00	0.00
(WY)	(1955)	(1955)	(1956)	(1957)	(1957)	(1956)	(1956)	(1955)	(1956)	(1956)	(1955)	(1956)

KANSAS RIVER BASIN

06870300 GYPSUM CREEK NEAR GYPSUM, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1955 - 2005
ANNUAL MEAN	20.5	29.3	25.2
HIGHEST ANNUAL MEAN			73.3
LOWEST ANNUAL MEAN			0.26
HIGHEST DAILY MEAN	1,540	Mar 5	3,500
LOWEST DAILY MEAN	0.37	Sep 13	0.00
ANNUAL SEVEN-DAY MINIMUM	0.51	Sep 8	0.00
MAXIMUM PEAK FLOW		2,270	11,400
MAXIMUM PEAK STAGE		17.84	20.71
INSTANTANEOUS LOW FLOW		0.33	0.00
ANNUAL RUNOFF (AC-FT)	14,850	21,250	18,290
10 PERCENT EXCEEDS	23	36	34
50 PERCENT EXCEEDS	6.6	7.3	7.0
90 PERCENT EXCEEDS	1.6	1.7	0.00

e Estimated



KANSAS RIVER BASIN

119

06871000 NORTH FORK SOLOMON RIVER AT GLADE, KS

LOCATION.--Lat 39°40'23", long 99°18'33", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.25, T.4 S., R.18 W., Phillips County, Hydrologic Unit 10260011, on left bank at downstream side of bridge on U.S. Highway 183, 0.5 mi south of Glade.

DRAINAGE AREA.--849 mi².

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,754.04 ft above NGVD of 1929. Prior to Feb. 17, 1965, at datum 2.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Apr 7	0200	*384	*6.07					No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.8	3.3	0.31	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.5	4.0	0.18	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.3	11	0.38	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.0	14	0.33	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	5.0	55	0.01	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	e0.66	4.8	32	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	231	4.4	20	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	69	4.1	13	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	39	3.4	10	0.15	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	28	3.3	11	0.35	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	23	2.9	14	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	21	2.5	24	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	19	2.5	25	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	15	2.4	17	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	13	2.1	13	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	11	2.3	11	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	9.8	2.3	10	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	9.5	3.0	8.2	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	8.9	2.7	6.9	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.01	8.0	4.6	6.0	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	7.5	5.6	6.1	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	6.8	3.3	5.5	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	6.0	2.3	4.3	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	5.8	1.8	3.5	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	6.0	2.0	3.0	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	5.8	1.1	2.1	4.4	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	5.4	0.74	2.4	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	5.9	0.65	3.5	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	6.3	1.9	1.0	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	6.0	3.7	0.57	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	3.7	---	0.00	0.00	---
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	18.9	3.25	11.3	0.20	0.00	0.00
MAX	0.00	0.00	0.00	0.00	0.01	231	5.8	55	4.4	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.57	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.02	1,130	200	675	12	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2005, BY WATER YEAR (WY)

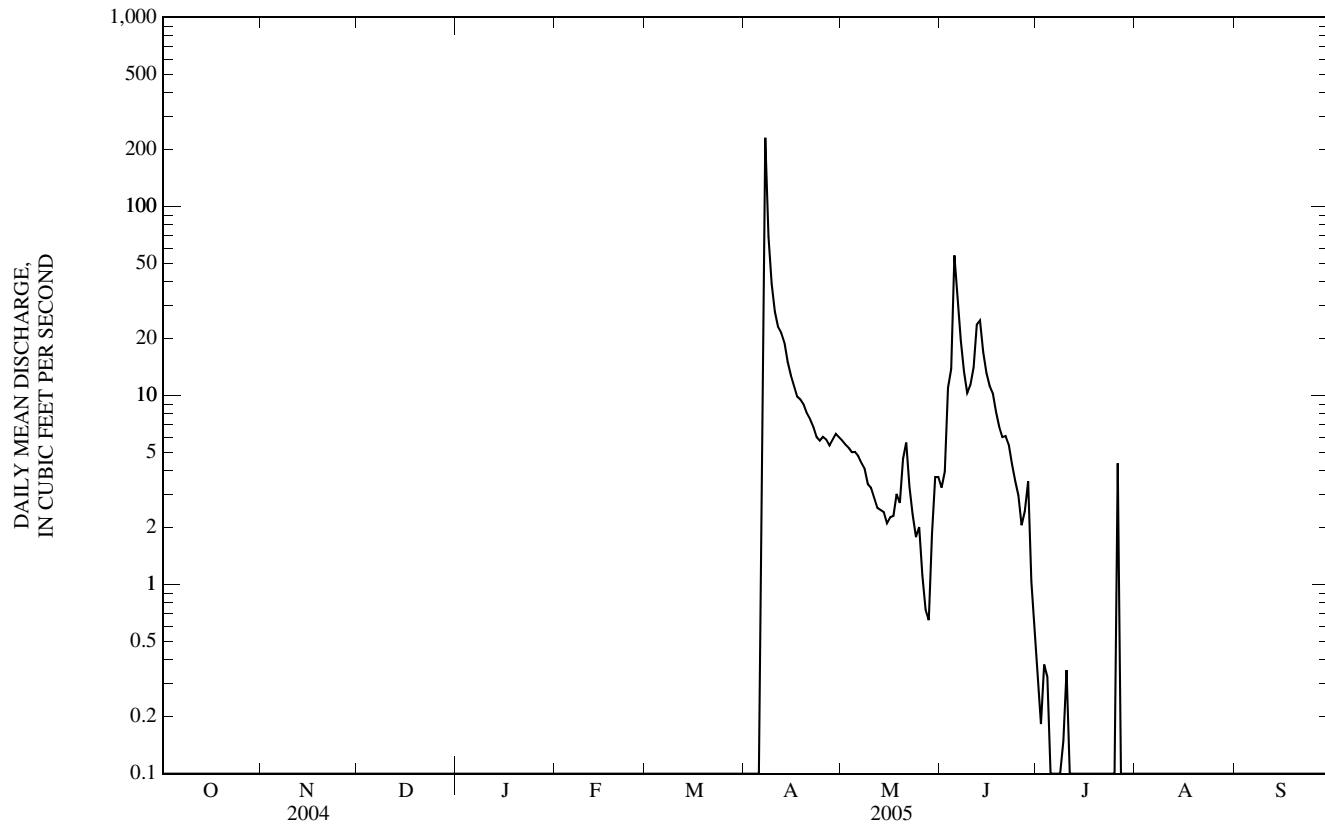
MEAN	12.4	8.43	8.58	9.77	17.4	26.5	24.3	51.1	66.5	37.8	29.1	16.5
MAX	318	60.6	59.5	66.8	105	250	98.7	512	1,011	182	315	249
(WY)	(1966)	(1994)	(1994)	(1994)	(1966)	(1960)	(1987)	(1995)	(1957)	(1957)	(1968)	(1965)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1959)	(1965)	(1956)	(1957)	(1957)	(1981)	(1981)	(2004)	(2004)	(1980)	(1956)	(1956)

KANSAS RIVER BASIN

06871000 NORTH FORK SOLOMON RIVER AT GLADE, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1953 - 2005
ANNUAL MEAN	0.00	2.78	25.7
HIGHEST ANNUAL MEAN			124
LOWEST ANNUAL MEAN			0.00
HIGHEST DAILY MEAN	0.00	Jan 1	2004
LOWEST DAILY MEAN	0.00	Jan 1	Jun 16, 1957
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	Sep 25, 1953
MAXIMUM PEAK FLOW		231	0.00
MAXIMUM PEAK STAGE		0.00	Sep 25, 1953
INSTANTANEOUS LOW FLOW		Apr 7	23,300
ANNUAL RUNOFF (AC-FT)	0.00	Apr 7	Jun 16, 1957
10 PERCENT EXCEEDS	0.00	Oct 1	18.55
50 PERCENT EXCEEDS	0.00	Oct 1	Jun 16, 1957
90 PERCENT EXCEEDS	0.00	Oct 1	at times
		2,010	18,640
		6.0	45
		0.00	7.3
		0.00	0.00

e Estimated



KANSAS RIVER BASIN

121

06871500 BOW CREEK NEAR STOCKTON, KS

LOCATION.--Lat 39°33'34", long 99°17'08", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.1, T.6 S., R.18 W., Rooks County, Hydrologic Unit 10260011, on left bank at downstream side of bridge on U.S. Highway 183, 8.5 mi north of Stockton.

DRAINAGE AREA.--341 mi².

PERIOD OF RECORD.--November 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,801.80 ft above NGVD of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Aug 29	0445	*223	*6.58					No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.00	e0.03	e1.4	e1.2	e1.4	e3.9	4.8	5.8	6.9	2.9	2.7	17
2	e0.00	e0.02	e1.3	e1.0	e1.5	e3.9	4.7	5.6	7.0	2.7	2.2	11
3	e0.34	e0.02	e1.2	e1.0	e1.7	e3.9	4.7	5.5	8.4	2.6	1.8	8.8
4	e2.5	e0.02	e1.2	e1.0	e2.1	e3.8	4.7	5.7	7.9	2.6	1.7	7.3
5	e0.33	e0.03	e1.2	e0.90	e3.4	e3.8	6.0	5.8	15	2.3	1.6	6.1
6	e0.36	e0.03	e1.2	e0.90	e3.0	e3.8	11	5.9	10	2.2	1.4	6.4
7	e0.22	e0.02	e1.2	e0.90	e2.8	e3.7	8.0	5.8	6.5	2.1	1.1	13
8	e0.04	e0.04	e1.2	e0.90	e2.6	e3.7	6.9	5.7	5.4	1.9	1.1	7.3
9	e0.01	e0.04	e1.2	e0.90	e2.8	e3.7	45	5.5	5.6	1.6	0.62	5.6
10	e0.01	e0.08	e1.2	e0.90	e3.0	e3.7	50	5.4	12	2.1	0.41	4.8
11	e0.02	e0.14	e1.2	e0.90	e3.6	e3.7	26	5.1	29	2.0	0.28	4.3
12	e0.01	e0.08	e1.2	e0.90	e4.4	e3.7	16	5.3	22	1.5	0.87	4.0
13	e0.01	e0.20	e1.2	e0.90	e4.8	e3.7	9.6	5.2	9.4	1.0	3.9	38
14	e0.01	e0.36	e1.2	e0.90	e5.0	e3.7	7.6	5.1	6.8	0.75	2.5	31
15	e0.01	e0.47	e1.2	e0.90	e4.8	3.5	6.7	4.9	6.0	0.58	1.8	12
16	e0.00	e0.53	e1.2	e0.90	e4.6	3.5	6.3	5.3	5.5	0.41	1.6	7.8
17	e0.00	e0.65	e1.2	e0.90	e4.5	3.6	5.9	5.2	5.4	0.24	1.6	6.3
18	e0.00	e0.99	e1.2	e1.1	e4.4	3.7	6.0	6.1	6.1	1.0	1.2	5.6
19	e0.00	e0.97	e1.2	e1.2	e4.3	3.6	5.8	5.3	7.3	0.69	2.1	5.3
20	e0.00	e1.0	e1.2	e1.4	e4.3	3.7	5.7	5.5	5.3	0.32	1.6	4.9
21	e0.01	e0.95	e1.2	e1.6	e4.2	6.6	5.7	4.8	5.3	0.12	1.4	4.5
22	e0.01	e1.3	e1.0	e1.7	e4.2	7.7	5.6	4.4	4.7	0.05	3.1	4.1
23	e0.00	e1.3	e1.0	e1.9	e4.1	8.6	5.5	4.2	4.6	0.01	4.7	4.0
24	e0.00	e1.3	e1.0	e1.9	e4.1	7.8	5.6	4.1	4.2	0.00	19	3.9
25	e0.01	e1.3	e1.0	e1.9	e4.1	5.9	5.8	4.9	3.9	0.01	11	3.7
26	e0.01	e1.4	e1.0	e1.6	e4.0	5.2	5.8	4.3	3.6	33	7.4	3.8
27	e0.02	e1.6	e1.0	e1.4	e4.0	4.9	5.7	4.7	3.5	63	5.2	3.6
28	e0.02	e1.6	e1.0	e1.4	e3.9	4.8	6.0	4.8	3.9	25	13	3.4
29	e0.02	e1.5	e1.2	e1.4	---	4.8	6.0	5.1	3.3	11	128	3.4
30	e0.01	e1.4	e1.2	e1.4	---	5.1	5.9	6.5	3.5	5.0	58	3.4
31	e0.02	---	e1.2	e1.4	---	4.9	---	7.1	---	3.3	29	---
MEAN	0.13	0.65	1.16	1.20	3.63	4.54	9.97	5.31	7.60	5.55	10.1	8.14
MAX	2.5	1.6	1.4	1.9	5.0	8.6	50	7.1	29	63	128	38
MIN	0.00	0.02	1.0	0.90	1.4	3.5	4.7	4.1	3.3	0.00	0.28	3.4
AC-FT	7.9	38	72	74	202	279	593	326	452	341	619	485

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2005, BY WATER YEAR (WY)

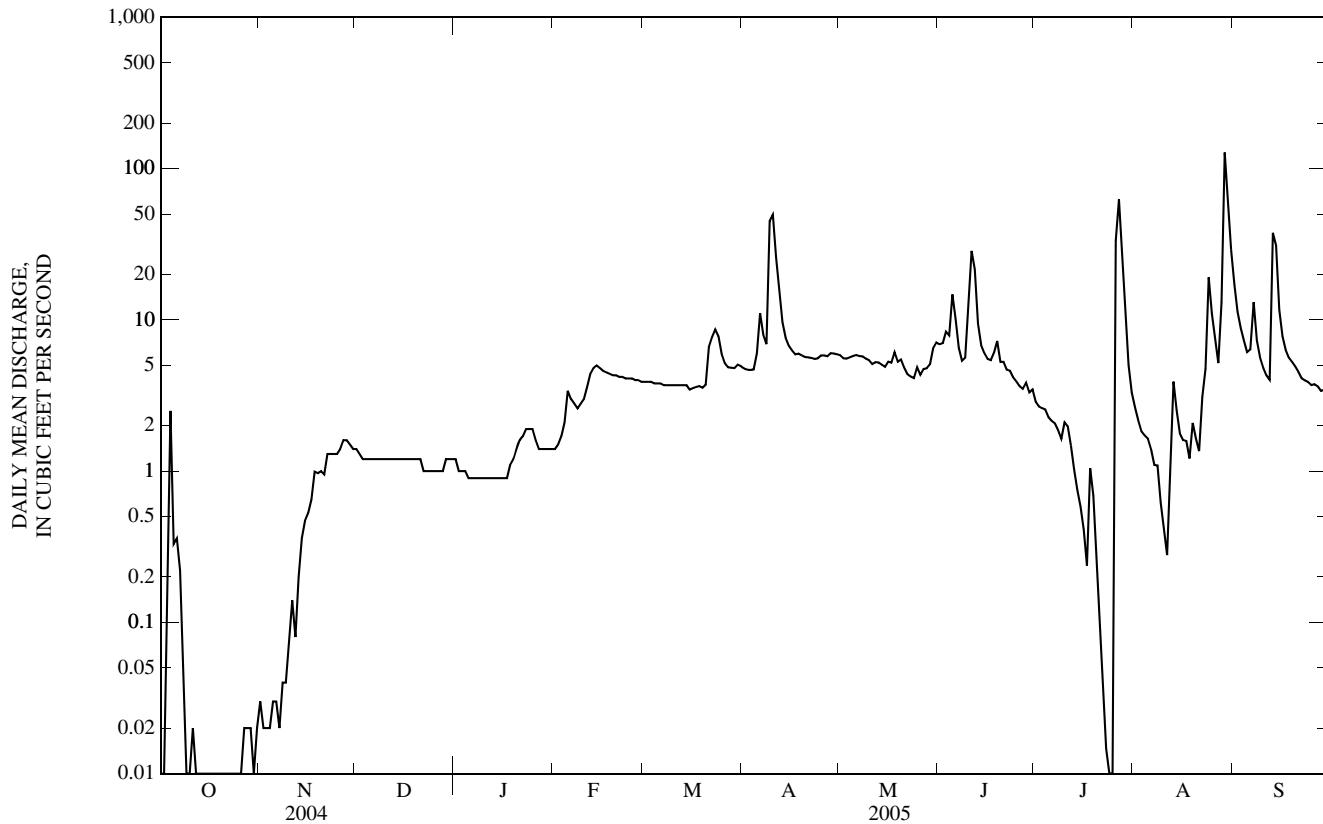
MEAN	7.04	5.25	5.34	5.78	9.31	11.9	12.2	26.3	37.1	30.4	13.9	9.53
(WY)	(1966)	(1994)	(1994)	(1994)	(1966)	(1960)	(1987)	(1995)	(1951)	(1951)	(1968)	(1951)
MAX	98.5	25.8	22.7	22.0	57.6	91.2	68.8	247	468	539	145	102
MIN	0.00	0.00	0.00	0.00	0.22	1.68	3.98	1.78	0.11	0.00	0.00	0.00
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1957)	(1982)	(2004)	(2004)	(1991)	(1964)	(1956)

KANSAS RIVER BASIN

06871500 BOW CREEK NEAR STOCKTON, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1951 - 2005
ANNUAL MEAN	1.89	4.82	12.9
HIGHEST ANNUAL MEAN			45.5
LOWEST ANNUAL MEAN			1.73
HIGHEST DAILY MEAN	21	Jul 7	4,990
LOWEST DAILY MEAN	0.00	Feb 7	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 15	0.00
MAXIMUM PEAK FLOW		223	12,900
MAXIMUM PEAK STAGE		6.58	13.60
INSTANTANEOUS LOW FLOW		0.00	0.00
ANNUAL RUNOFF (AC-FT)	1,370	3,490	9,320
10 PERCENT EXCEEDS	5.7	7.6	17
50 PERCENT EXCEEDS	0.74	3.4	5.3
90 PERCENT EXCEEDS	0.00	0.04	0.25

e Estimated



06872500 NORTH FORK SOLOMON RIVER AT PORTIS, KS

LOCATION.--Lat 39°33'18", long 98°41'31", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.5, T.6 S., R.12 W., Osborne County, Hydrologic Unit 10260012, on left bank at downstream side of bridge on U.S. Highway 281, 0.5 mi south of Portis, and at mile 27.0.

DRAINAGE AREA.--2,315 mi², approximately.

PERIOD OF RECORD.--September 1945 to current year. Prior to Oct. 1, 1964, published as "near Downs."

GAGE.--Water-stage recorder. Datum of gage is 1,490.71 ft above NGVD of 1929. Prior to Dec. 5, 1946, nonrecording gage and Dec. 5, 1946, to Sept. 30, 1964, water-stage recorder at site 9.0 mi downstream at datum 30.39 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow partially regulated since 1955 by Kirwin Reservoir (station 06871700), 40.8 mi upstream. Natural flow also affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 15, 1915, reached a stage about 1.0 ft higher than that of July 12, 1951, from information by Kansas Highway Commission.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	8.4	e9.0	8.8	11	12	13	16	20	6.2	18	13
2	6.4	8.8	e10	8.5	11	11	12	16	25	9.0	11	14
3	6.4	8.9	e9.5	9.0	10	11	12	16	49	9.4	5.2	15
4	6.2	9.0	9.3	8.2	10	11	11	16	104	7.2	4.0	11
5	6.2	9.1	9.2	e7.8	10	11	12	15	86	4.7	3.5	9.6
6	8.7	9.1	8.9	e8.0	14	11	15	14	54	5.1	4.2	11
7	11	9.0	8.7	e8.2	e13	11	123	14	54	6.0	5.1	10
8	10	8.7	8.4	e8.5	e12	10	456	14	66	3.1	6.8	11
9	8.7	8.9	8.5	e9.0	e11	10	172	13	42	1.7	5.4	9.5
10	7.5	9.5	8.5	e9.0	e12	10	95	13	759	1.4	5.2	7.9
11	7.7	10	8.5	e9.4	e18	10	67	12	161	12	4.4	8.5
12	7.4	9.5	8.3	e10	16	10	76	13	56	12	4.5	11
13	7.4	9.4	8.1	e9.0	16	10	70	14	36	4.0	272	8.5
14	7.3	9.1	e8.5	e8.5	14	10	101	13	27	2.0	327	7.6
15	7.6	9.2	e8.8	e8.0	13	10	68	12	29	1.4	111	8.9
16	8.1	9.5	9.0	e9.0	13	10	48	12	25	1.2	44	8.2
17	8.0	9.5	8.7	e10	12	10	38	12	20	2.3	23	7.3
18	7.8	10	8.7	e13	13	10	32	12	18	12	19	7.0
19	7.7	10	8.7	e16	13	9.8	28	11	16	6.5	109	6.7
20	7.8	9.8	e8.7	e18	13	10	26	11	15	3.6	65	6.4
21	7.8	9.0	e8.9	e16	14	17	25	10	21	3.9	28	6.2
22	7.7	8.7	e9.5	e15	14	22	22	9.4	47	4.1	25	5.7
23	7.8	8.6	e10	e14	13	19	20	9.1	74	3.7	21	5.7
24	7.7	8.4	11	e15	13	19	19	11	30	3.0	17	5.7
25	7.6	8.4	13	e16	13	18	19	10	17	3.6	15	5.6
26	7.4	8.5	13	e14	13	18	19	7.6	14	44	16	5.4
27	7.6	8.7	13	13	13	22	18	7.6	13	383	15	5.1
28	8.2	8.7	12	13	12	19	17	8.2	10	453	13	5.1
29	9.1	9.0	11	12	---	17	18	6.5	8.2	187	13	5.3
30	8.8	8.8	9.8	12	---	15	17	10	6.4	83	27	5.3
31	8.4	---	9.4	12	---	13	---	16	---	37	19	---
MEAN	7.82	9.07	9.57	11.2	12.9	13.1	55.6	12.1	63.4	42.5	40.5	8.24
MAX	11	10	13	18	18	22	456	16	759	453	327	15
MIN	6.2	8.4	8.1	7.8	10	9.8	11	6.5	6.4	1.2	3.5	5.1
AC-FT	481	540	588	690	714	807	3,310	743	3,770	2,610	2,490	490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2005, BY WATER YEAR (WY)

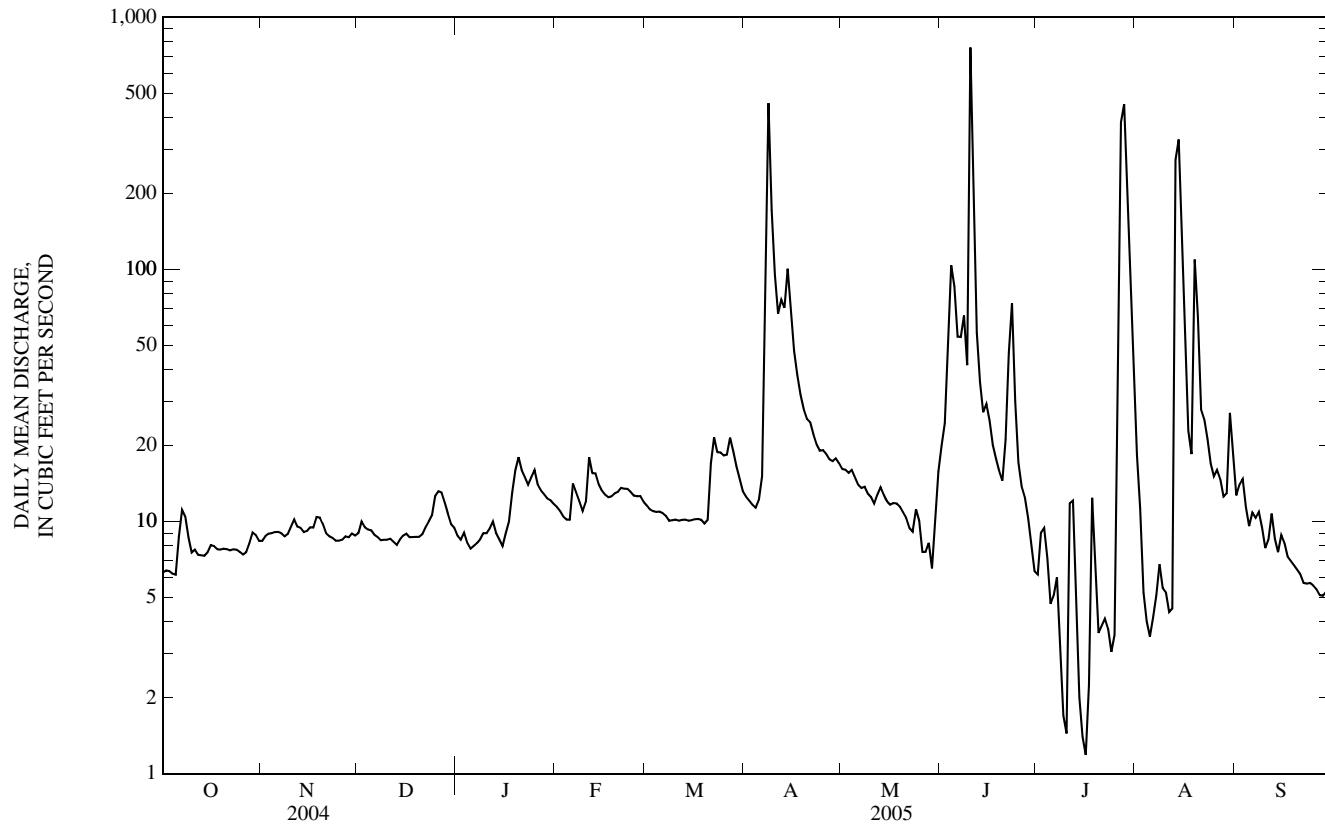
MEAN	68.7	47.1	38.9	44.1	78.8	102	86.1	173	299	230	139	95.8
(WY)	(1947)	(1997)	(1994)	(1994)	(1949)	1,043	498	1,416	3,516	4,031	2,247	758
MIN	0.65	1.44	2.08	2.19	6.29	9.53	6.81	2.25	5.46	4.03	1.39	0.29
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1956)	(1956)	(1956)	(2004)	(1991)	(1956)	(1956)

KANSAS RIVER BASIN

06872500 NORTH FORK SOLOMON RIVER AT PORTIS, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1946 - 2005	
ANNUAL MEAN	12.6		23.8		117	
HIGHEST ANNUAL MEAN					855	1951
LOWEST ANNUAL MEAN					13.2	2004
HIGHEST DAILY MEAN	198	Jul 9	759	Jun 10	32,300	Jul 12, 1951
LOWEST DAILY MEAN	1.4	Jun 11	1.2	Jul 16	0.00	Aug 25, 1956
ANNUAL SEVEN-DAY MINIMUM	2.2	Jun 8	4.1	Jul 19	0.07	Aug 23, 1956
MAXIMUM PEAK FLOW			1,320	Jun 10	35,700	Jul 12, 1951
MAXIMUM PEAK STAGE			10.35	Jun 10	30.41	Jul 12, 1951
INSTANTANEOUS LOW FLOW			1.0	Jul 17	0.00	at times
ANNUAL RUNOFF (AC-FT)	9,140		17,240		84,790	
10 PERCENT EXCEEDS	18		34		172	
50 PERCENT EXCEEDS	10		10		32	
90 PERCENT EXCEEDS	5.1		6.2		10	

e Estimated



06873000 SOUTH FORK SOLOMON RIVER ABOVE WEBSTER RESERVOIR, KS

LOCATION.--Lat 39°22'36", long 99°34'47", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.8, T.8 S., R.20 W., Rooks County, Hydrologic Unit 10260013, on right bank 0.4 mi downstream from county highway bridge, 4.0 mi north of Damar, 7.0 mi downstream from Wild Horse Creek, and 11 mi upstream from Webster Dam.

DRAINAGE AREA.--1,040 mi², approximately.

PERIOD OF RECORD.--January 1945 to current year. Prior to October 1953, published as "at Webster."

REVISED RECORDS.--WSP 1440: 1945-48, 1950.

GAGE.--Water-stage recorders. Datum of gage is 1,933.51 ft above NGVD of 1929 (levels by Bureau of Reclamation). Prior to May 17, 1946, nonrecording gage, May 17, 1946, to May 20, 1951, water-stage recorder, and May 21 to Sept. 30, 1951, nonrecording gage, all at site 8.0 mi downstream at datum 91.52 ft lower. Oct. 1, 1951, to May 22, 1952, nonrecording gage at bridge near Stockton, 23 mi downstream, at different datum. May 23, 1952, to May 23, 1954, water-stage recorder at original site and datum. May 31, 1954, to Sept. 30, 1999, water-stage recorder at county highway bridge 4.0 mi north of Damar at datum 3 ft lower. Oct. 1, 1999, supplementary water-stage recorder converted to water-stage recorder gage at site 0.4 mi downstream at present site and datum. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1908, 13.4 ft, June 1908, present site and datum, discharge not determined, from information obtained from Kansas Highway Commission.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Apr 7	0515	*332	*5.07					No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	e0.09	0.49	1.0	1.9	18	19	6.5	1.3	0.04	0.00
2	0.00	0.00	e0.09	0.41	0.90	1.9	17	18	7.3	0.69	0.00	0.00
3	0.00	0.00	e0.10	0.49	0.87	2.0	15	17	9.1	0.27	0.00	0.00
4	0.00	0.00	e0.12	e0.45	0.98	1.9	14	17	10	0.11	0.00	0.00
5	0.00	0.00	e0.14	e0.40	1.1	2.0	14	16	9.0	0.01	0.00	0.00
6	0.00	0.00	0.15	e0.35	1.8	2.0	15	15	8.8	0.00	0.00	0.00
7	0.00	0.00	0.12	e0.40	1.8	2.1	193	14	8.5	0.00	0.00	0.00
8	0.00	0.00	0.14	e0.40	e1.7	2.0	103	13	6.4	0.00	0.00	0.00
9	0.00	0.00	0.16	e0.50	e1.8	2.2	69	12	6.9	0.00	0.00	0.00
10	0.00	0.06	0.13	e0.45	e1.8	2.3	55	12	20	0.00	0.00	0.00
11	0.00	0.10	e0.12	e0.45	1.8	2.4	50	11	30	0.00	0.00	0.00
12	0.00	0.07	0.14	0.50	1.9	2.4	49	10	34	0.00	0.00	0.00
13	0.00	0.07	0.18	e0.45	2.2	2.4	42	9.2	26	0.00	0.00	0.00
14	0.00	0.08	e0.10	e0.40	1.6	2.5	37	8.8	20	0.00	0.00	0.00
15	0.00	0.11	e0.12	e0.40	1.4	2.6	35	8.2	16	0.00	0.00	0.00
16	0.00	0.11	e0.12	e0.50	1.3	2.7	33	7.4	14	0.00	0.00	0.00
17	0.00	0.14	e0.13	e0.55	1.3	2.9	31	7.0	12	0.00	0.00	0.00
18	0.00	0.29	0.14	e0.65	1.3	2.8	30	13	10	0.00	0.00	0.00
19	0.00	0.20	e0.12	e0.75	1.5	2.6	28	9.7	8.5	0.00	0.00	0.00
20	0.00	0.12	e0.13	0.81	1.6	2.9	27	8.3	6.7	0.00	0.00	0.00
21	0.00	0.09	e0.12	e0.75	1.5	7.2	25	7.1	7.8	0.00	0.00	0.00
22	0.00	0.11	e0.10	e0.60	1.5	23	23	6.0	7.4	0.00	0.00	0.00
23	0.00	0.11	e0.09	e0.60	1.7	31	21	5.3	5.5	0.00	0.00	0.00
24	0.00	0.10	e0.09	e0.80	1.7	28	21	5.5	4.6	0.00	0.00	0.00
25	0.00	0.11	e0.10	0.85	1.7	23	21	5.9	4.1	0.00	0.00	0.00
26	0.00	0.15	e0.13	e0.80	1.8	20	20	5.3	3.5	30	0.00	0.00
27	0.00	0.13	e0.20	e0.85	1.8	19	19	4.8	3.1	16	0.00	0.00
28	0.00	0.09	e0.23	0.88	1.9	17	19	4.5	2.8	2.4	0.00	0.00
29	0.00	0.11	e0.40	0.90	---	16	19	4.4	2.2	0.68	0.00	0.00
30	0.00	e0.10	0.51	0.99	---	18	20	4.8	1.8	0.27	0.00	0.00
31	0.00	---	0.76	1.0	---	18	---	6.4	---	0.12	0.00	---
MEAN	0.00	0.08	0.17	0.61	1.54	8.60	36.1	9.86	10.4	1.67	0.00	0.00
MAX	0.00	0.29	0.76	1.0	2.2	31	193	19	34	30	0.04	0.00
MIN	0.00	0.00	0.09	0.35	0.87	1.9	14	4.4	1.8	0.00	0.00	0.00
AC-FT	0.00	4.9	10	37	86	529	2,150	606	620	103	0.08	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2005, BY WATER YEAR (WY)

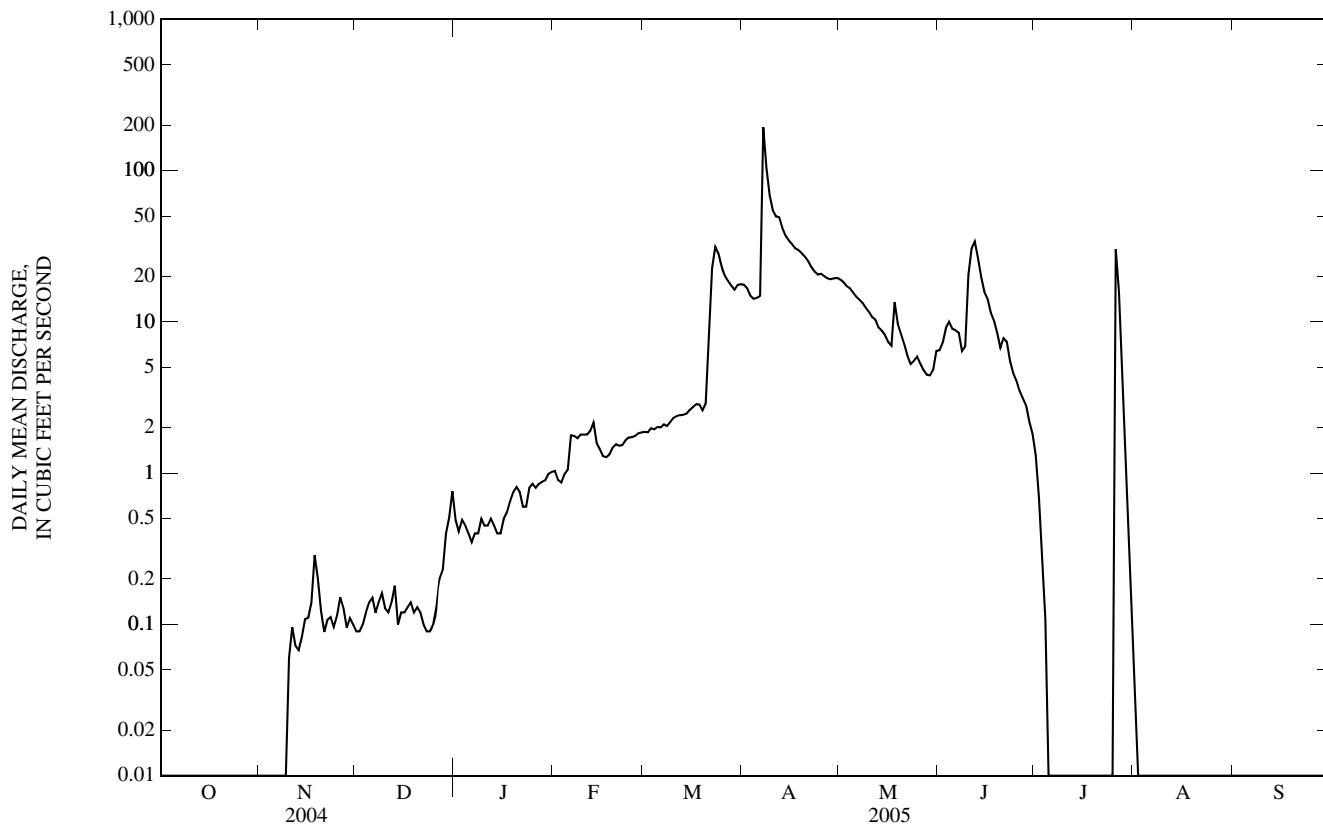
MEAN	33.0	15.5	15.0	16.9	31.5	40.7	44.7	80.3	117	116	59.7	31.1
MAX	1,003	124	84.4	77.1	219	314	174	724	1,767	2,561	1,029	385
(WY)	(1947)	(1947)	(1994)	(1994)	(1949)	(1960)	(1998)	(1995)	(1951)	(1951)	(1950)	(1951)
MIN	0.00	0.00	0.00	0.00	0.02	0.67	0.28	0.06	0.00	0.00	0.00	0.00
(WY)	(1946)	(1946)	(1982)	(1982)	(1992)	(1982)	(1989)	(2004)	(2004)	(1966)	(1946)	(1947)

KANSAS RIVER BASIN

06873000 SOUTH FORK SOLOMON RIVER ABOVE WEBSTER RESERVOIR, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1946 - 2005
ANNUAL MEAN	1.85	5.72	50.2
HIGHEST ANNUAL MEAN			487
LOWEST ANNUAL MEAN			1.59
HIGHEST DAILY MEAN	163	Jul 2	35,000
LOWEST DAILY MEAN	0.00	Jan 1	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00
MAXIMUM PEAK FLOW		332	55,200
MAXIMUM PEAK STAGE		5.07	14.90
INSTANTANEOUS LOW FLOW		0.00	0.00
ANNUAL RUNOFF (AC-FT)	1,340	4,140	36,400
10 PERCENT EXCEEDS	1.1	19	73
50 PERCENT EXCEEDS	0.04	0.41	12
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated



KANSAS RIVER BASIN

127

06873460 SOUTH FORK SOLOMON RIVER AT WOODSTON, KS

LOCATION.--39°26'23", long 99°06'05", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.16, T.7 S., R.16 W., Rooks County, Hydrologic Unit 10260014, on left bank near upstream side of county highway bridge, 0.8 mi south of Woodston, and at mile 64.1.

DRAINAGE AREA.--1,502 mi².

PERIOD OF RECORD.--October 1978 to current year.

REVISED RECORDS.--WDR KS-82-1: 1979(M) (monthly runoff), 1980 (monthly runoff).

GAGE.--Water-stage recorder. Datum of gage is 1,660.78 ft above NGVD of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow moderately regulated since 1956 by Webster Reservoir (station 06873100), 28.3 mi upstream, and Woodston diversion dam, 1.9 mi upstream. Natural flow also affected by ground-water withdrawals and return flow from irrigated areas. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.48	0.86	0.71	0.42	0.38	0.27	0.92	0.46	0.45	0.15	0.01	0.12
2	0.45	0.84	0.71	0.35	0.33	0.27	0.57	0.52	0.36	0.19	0.01	0.13
3	0.44	0.86	0.68	e0.34	0.33	0.29	0.50	0.48	0.91	0.24	0.01	0.13
4	0.40	0.82	0.67	0.36	0.34	0.32	0.52	0.47	0.62	0.23	0.01	0.12
5	0.42	0.84	0.71	0.35	0.37	0.33	1.5	0.48	0.34	0.24	0.01	0.11
6	0.80	0.81	0.68	0.49	e0.50	0.31	1.1	0.52	0.39	0.17	0.01	0.19
7	0.66	0.72	0.66	0.52	0.46	0.33	1.6	0.51	0.32	0.14	0.01	0.17
8	0.50	0.73	0.67	0.45	0.43	0.20	0.95	0.43	0.34	0.12	0.01	0.15
9	0.51	0.65	0.68	0.54	0.40	0.23	0.51	0.38	1.9	0.09	0.01	0.12
10	0.56	0.63	0.65	0.52	0.45	0.25	0.83	0.39	1.9	0.07	0.01	0.08
11	0.65	0.58	0.69	0.51	0.47	0.25	0.71	0.33	1.00	0.05	0.01	0.07
12	0.60	0.53	0.57	0.51	0.46	0.25	0.68	0.35	2.1	0.05	0.02	0.09
13	0.59	0.52	0.51	0.44	0.47	0.24	1.2	0.40	1.7	0.05	0.20	0.06
14	0.60	0.52	0.52	0.38	0.43	0.26	2.7	0.35	1.4	0.05	0.06	0.07
15	0.59	0.58	0.53	0.34	0.31	0.26	1.1	0.33	0.86	0.05	0.03	0.13
16	0.54	0.59	0.52	0.36	0.28	0.23	0.72	0.31	0.89	0.04	0.03	0.12
17	0.53	0.60	0.58	0.35	0.30	0.29	0.73	0.30	0.64	0.04	0.03	0.11
18	0.51	0.83	0.61	0.43	0.28	0.26	0.74	0.32	0.69	e0.04	0.04	0.11
19	0.53	0.62	0.59	0.52	0.32	0.28	0.61	0.22	0.56	e0.03	0.04	0.12
20	0.57	0.55	0.59	0.63	0.30	0.36	0.47	0.17	0.55	e0.03	0.04	0.09
21	0.59	0.55	0.55	0.57	0.30	0.93	0.40	0.17	0.66	e0.03	0.03	0.08
22	0.59	0.56	0.48	0.41	0.33	0.60	0.44	0.12	0.62	e0.03	2.0	0.07
23	0.54	0.53	0.39	0.41	0.32	0.40	0.47	0.15	0.43	e0.03	0.42	0.07
24	0.54	0.52	0.44	0.43	0.32	0.35	0.56	0.14	0.37	e0.03	0.18	0.08
25	0.53	0.54	0.54	0.43	0.28	0.32	0.71	0.23	0.32	e0.04	0.14	0.07
26	0.57	0.60	0.50	0.44	0.26	0.31	0.63	0.24	0.28	e0.11	0.26	0.07
27	0.64	0.65	0.45	0.42	0.31	0.33	0.49	0.27	0.27	0.05	0.15	0.06
28	0.79	0.68	0.45	0.43	0.22	0.46	0.60	0.24	0.30	0.03	1.6	0.06
29	0.86	0.74	0.46	0.43	---	0.52	0.61	0.27	0.23	0.02	0.22	0.07
30	0.81	0.72	0.51	0.44	---	0.59	0.59	0.45	0.18	0.01	0.15	0.07
31	0.86	---	0.44	0.40	---	0.51	---	0.75	---	0.01	0.13	---
MEAN	0.59	0.66	0.57	0.44	0.36	0.35	0.81	0.35	0.72	0.08	0.19	0.10
MAX	0.86	0.86	0.71	0.63	0.50	0.93	2.7	0.75	2.1	0.24	2.0	0.19
MIN	0.40	0.52	0.39	0.34	0.22	0.20	0.40	0.12	0.18	0.01	0.01	0.06
AC-FT	36	39	35	27	20	21	48	21	43	4.9	12	5.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2005, BY WATER YEAR (WY)

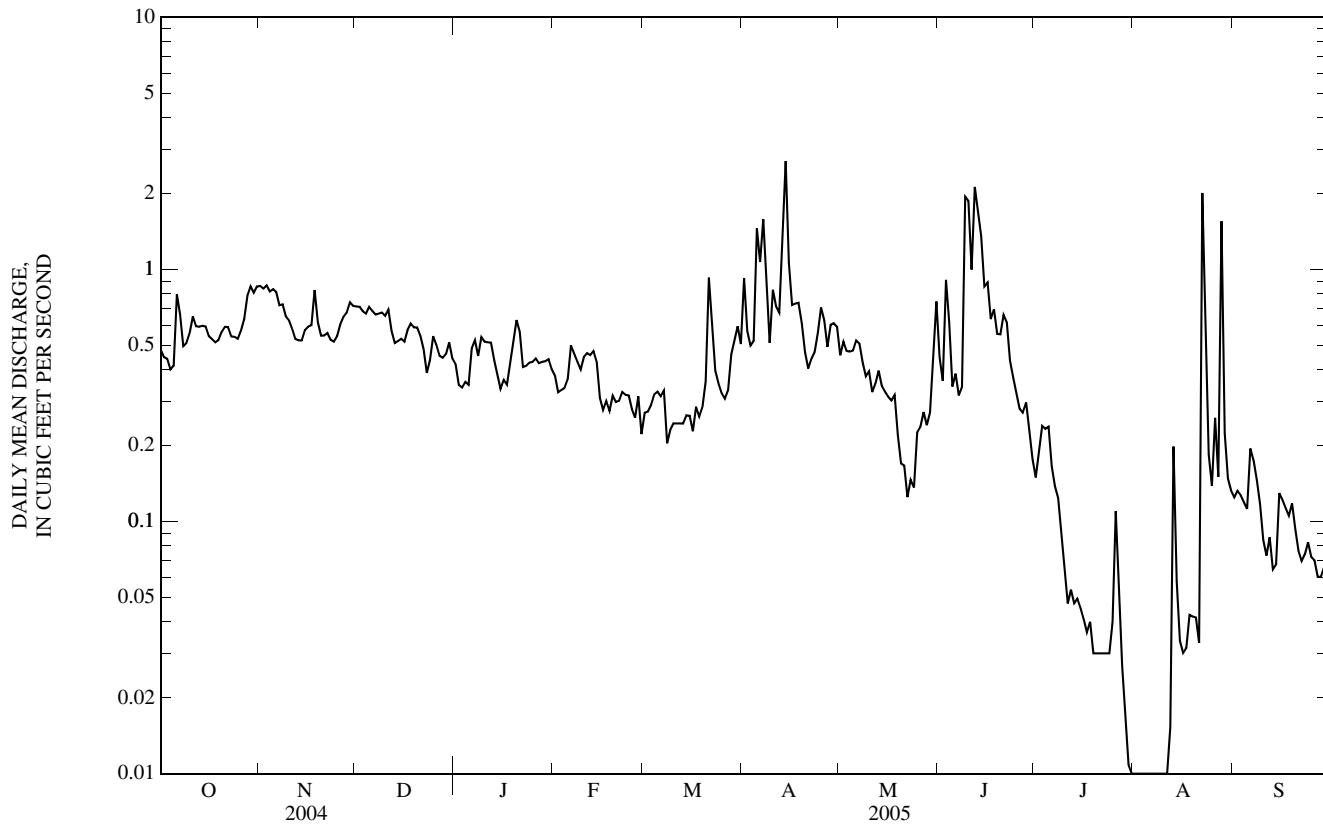
MEAN	14.8	19.6	28.6	20.5	27.2	42.3	62.6	72.3	56.6	116	40.4	17.3
(WY)	186	240	541	228	271	282	663	723	862	1,742	346	161
(1994)	(1994)	(1994)	(1994)	(1994)	(1994)	(1994)	(1987)	(1995)	(1995)	(1993)	(1993)	(1993)
MIN	0.01	0.05	0.11	0.05	0.36	0.35	0.36	0.31	0.10	0.08	0.14	0.10
(WY)	(1979)	(1982)	(1982)	(1982)	(2005)	(2005)	(1982)	(1982)	(1981)	(2005)	(1981)	(2005)

KANSAS RIVER BASIN

06873460 SOUTH FORK SOLOMON RIVER AT WOODSTON, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1979 - 2005
ANNUAL MEAN	2.21	0.43	43.4
HIGHEST ANNUAL MEAN			248
LOWEST ANNUAL MEAN			0.43
HIGHEST DAILY MEAN	120	Jul 8	7,260
LOWEST DAILY MEAN	0.09	Jun 14	0.00
ANNUAL SEVEN-DAY MINIMUM	0.11	Jun 8	0.00
MAXIMUM PEAK FLOW		19	8,710
MAXIMUM PEAK STAGE		4.61	22.89
INSTANTANEOUS LOW FLOW		0.01	0.00
ANNUAL RUNOFF (AC-FT)	1,600	313	31,430
10 PERCENT EXCEEDS	3.6	0.73	85
50 PERCENT EXCEEDS	0.65	0.42	5.2
90 PERCENT EXCEEDS	0.37	0.05	0.40

e Estimated



KANSAS RIVER BASIN

129

06874000 SOUTH FORK SOLOMON RIVER AT OSBORNE, KS

LOCATION.--Lat 39°25'40", long 98°41'38", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.20, T.7 S., R.12 W., Osborne County, Hydrologic Unit 10260014, on right bank at downstream side of bridge on U.S. Highway 281, 0.5 mi south of Osborne, 0.6 mi downstream from Covert Creek, and at mile 27.6.

DRAINAGE AREA.--2,012 mi².

PERIOD OF RECORD.--March 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,505.09 ft above NGVD of 1929. Prior to Dec. 12, 1946, nonrecording gage at same site and datum.

REMARKS.--Records fair except those less than 1 ft³/s and estimated daily discharges, which are poor. Flow moderately regulated since 1956 by Webster Reservoir (station 06873100), 64.8 mi upstream. Diversions upstream from station for irrigation. Occasional low-water regulation by Osborne city reservoir, 1.5 mi upstream. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	e6.6	7.8	9.0	7.8	5.6	6.5	7.7	5.7	4.0	0.99	3.9
2	5.1	e6.8	8.4	8.7	7.6	6.0	6.5	7.5	24	3.8	0.77	3.9
3	5.1	e7.2	8.3	e8.4	7.4	6.2	6.3	7.4	238	3.8	0.68	3.7
4	5.0	e7.6	9.4	e8.2	7.3	6.1	6.4	7.1	77	3.8	0.68	3.1
5	5.1	e8.0	9.0	e8.0	7.2	6.0	6.7	7.0	27	3.5	0.83	2.7
6	6.2	e8.2	8.7	e8.0	15	6.5	8.2	7.0	11	3.4	0.80	5.5
7	6.8	e8.4	8.3	e8.0	e12	6.7	71	6.9	6.0	2.0	0.80	6.0
8	6.7	e8.4	8.2	e8.0	e10	7.1	34	6.7	7.6	0.71	0.71	4.7
9	6.0	e8.6	8.3	e8.4	e9.0	7.2	19	6.4	6.8	1.6	0.67	3.7
10	5.7	e9.4	8.1	e8.2	e8.5	e7.0	16	6.2	124	1.6	0.64	2.9
11	5.7	e9.0	8.0	e8.0	e7.5	6.7	12	5.8	81	1.6	0.66	2.6
12	5.7	e9.0	8.3	e8.0	8.9	6.7	8.7	6.2	56	0.78	0.99	2.5
13	5.9	e9.1	7.9	e7.8	12	6.5	12	6.3	26	0.47	5.4	2.3
14	5.9	e9.0	7.0	e7.6	13	6.5	11	5.9	16	0.55	125	2.1
15	6.0	e9.5	8.0	e7.4	11	6.8	11	5.7	13	1.4	34	3.4
16	6.1	e9.4	8.8	e7.2	7.9	6.6	10	5.6	12	1.3	12	3.2
17	6.2	e8.4	8.6	e7.6	7.1	6.5	10	5.2	10	1.0	7.4	2.8
18	6.2	e8.7	8.7	e7.8	6.7	6.7	9.9	5.0	9.2	1.2	6.4	2.6
19	5.8	e8.5	8.4	e8.4	6.6	6.6	9.3	4.8	8.3	0.92	5.7	2.3
20	6.1	8.5	7.7	e9.0	6.3	6.8	9.1	4.6	7.5	0.75	5.4	2.1
21	5.6	8.9	e7.6	e10	6.2	9.5	9.1	4.5	8.3	0.79	5.3	1.8
22	5.9	9.2	e7.2	e9.6	6.0	17	8.5	4.0	9.0	0.34	5.2	1.1
23	5.8	8.9	e7.0	e9.4	6.1	14	8.1	3.7	7.4	0.39	9.3	1.3
24	5.7	8.8	e7.2	10	6.1	12	8.0	3.5	6.0	0.24	6.9	2.0
25	5.5	9.0	e7.4	10	6.0	9.7	8.6	3.8	5.5	1.7	5.3	1.4
26	5.9	9.1	e9.0	9.6	5.9	8.5	8.4	3.0	4.9	124	8.7	1.0
27	5.4	9.9	e9.0	9.6	6.1	7.8	8.0	2.1	4.5	31	8.2	1.0
28	e5.8	9.2	e8.6	9.3	5.9	7.3	8.0	2.5	9.4	6.9	5.8	1.5
29	e6.0	9.8	e9.0	9.0	---	7.0	8.0	4.3	5.1	3.8	5.1	1.4
30	e6.2	8.7	9.9	8.6	---	7.1	7.8	5.8	4.4	2.2	4.6	1.6
31	e6.4	---	9.5	8.0	---	6.6	---	5.8	---	1.4	4.0	---
MEAN	5.83	8.66	8.30	8.54	8.11	7.65	12.2	5.42	27.7	6.80	9.00	2.67
MAX	6.8	9.9	9.9	10	15	17	71	7.7	238	124	125	6.0
MIN	5.0	6.6	7.0	7.2	5.9	5.6	6.3	2.1	4.4	0.24	0.64	1.0
AC-FT	358	515	510	525	450	471	726	333	1,650	418	553	159

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2005, BY WATER YEAR (WY)

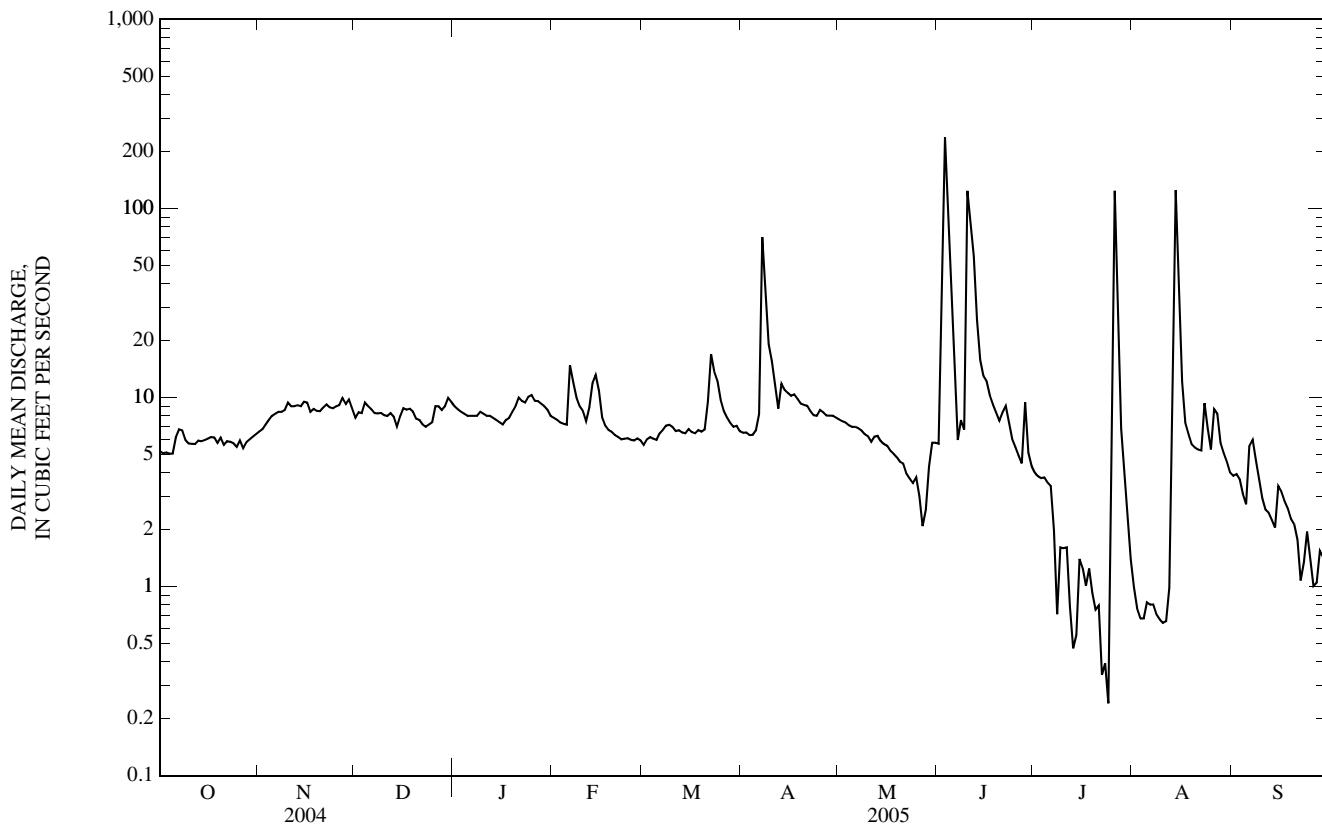
MEAN	58.2	42.2	38.8	37.3	60.2	89.8	114	147	235	291	107	68.5
(WY)	(1947)	(1997)	(1994)	(1994)	(1949)	(1993)	(1987)	(1995)	(1951)	(1951)	(1950)	(1951)
MAX	792	353	630	342	487	644	1,437	1,158	3,675	5,193	1,666	708
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1957)	(1972)	(2005)	(1981)	(1955)	(1978)	(1956)

KANSAS RIVER BASIN

06874000 SOUTH FORK SOLOMON RIVER AT OSBORNE, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1947 - 2005	
ANNUAL MEAN	10.5		9.21		108	
HIGHEST ANNUAL MEAN					994	1951
LOWEST ANNUAL MEAN					9.21	2005
HIGHEST DAILY MEAN	272	Jul 9	238	Jun 3	53,500	Jul 12, 1951
LOWEST DAILY MEAN	2.7	Jun 11	0.24	Jul 24	0.00	Sep 24, 1984
ANNUAL SEVEN-DAY MINIMUM	3.3	Jun 10	0.66	Jul 18	0.17	Sep 11, 1981
MAXIMUM PEAK FLOW			421	Jun 3	81,200	Jul 13, 1951
MAXIMUM PEAK STAGE			8.02	Jun 3	28.33	Jul 21, 1993
INSTANTANEOUS LOW FLOW			0.15	Jul 24	0.00	many years
ANNUAL RUNOFF (AC-FT)	7,610		6,670		78,040	
10 PERCENT EXCEEDS	13		10		185	
50 PERCENT EXCEEDS	8.1		6.9		22	
90 PERCENT EXCEEDS	4.6		1.6		5.5	

e Estimated



KANSAS RIVER BASIN

131

06875900 SOLOMON RIVER NEAR GLEN ELDER, KS

LOCATION.--Lat 39°28'26", long 98°17'00", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.2, T.7 S., R.9 W., Mitchell County, Hydrologic Unit 10260015, on right bank, 3.6 mi downstream from Glen Elder Dam, 2.0 mi southeast of Glen Elder, and at mile 168.8.

DRAINAGE AREA.--5,340 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Concrete control since Mar. 4, 1970. Datum of gage is 1,374.13 ft above NGVD of 1929 (levels by Bureau of Reclamation).

REMARKS.--Records good. Flow mostly regulated since 1967 by Waconda Lake (station 06874200), which in turn is moderately regulated since 1955 by Kirwin Reservoir (station 06871700), and since 1956 by Webster Reservoir (station 06873100). Large diversions downstream from Kirwin and Webster Reservoirs and many small diversions upstream from Waconda Lake for irrigation. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	15	15	13	14	13	14	14	14	67	32	13
2	15	15	15	13	14	13	14	14	15	69	54	13
3	15	15	15	13	14	13	14	14	58	67	71	13
4	15	15	16	13	14	13	14	14	27	68	88	13
5	15	15	15	14	14	13	15	14	17	71	86	14
6	16	15	15	14	15	14	92	14	15	77	85	14
7	16	15	15	14	14	14	43	14	14	78	85	13
8	15	15	15	14	14	14	16	14	14	79	92	13
9	15	15	15	14	14	14	15	14	15	80	96	13
10	15	16	15	14	13	14	15	14	15	81	89	13
11	15	15	15	14	13	14	17	14	14	92	82	13
12	15	15	15	14	13	14	16	15	15	93	69	13
13	15	15	15	14	14	14	15	15	16	97	36	13
14	15	15	15	13	13	14	15	14	15	96	15	13
15	15	15	15	13	14	14	15	14	14	98	27	14
16	15	15	15	13	13	13	15	14	18	98	45	13
17	15	15	15	14	13	14	15	14	40	98	39	13
18	15	15	15	14	13	15	15	15	39	72	38	13
19	15	15	15	14	13	14	15	23	39	45	38	13
20	15	15	15	14	14	14	15	27	38	44	26	13
21	15	15	15	14	13	15	16	30	42	46	14	13
22	15	15	15	14	14	14	16	30	53	57	14	13
23	15	15	15	14	14	14	15	32	56	75	33	13
24	15	15	14	14	14	14	15	37	67	86	18	13
25	15	15	14	14	13	14	15	42	63	89	15	13
26	15	15	13	14	13	14	15	44	62	378	15	13
27	15	15	13	14	13	14	15	44	65	286	15	13
28	15	15	13	14	14	14	14	44	83	123	14	13
29	15	15	13	14	---	14	15	41	91	41	14	13
30	15	15	13	14	---	14	14	26	78	24	14	13
31	15	---	13	14	---	14	---	14	---	18	13	---
MEAN	15.1	15.0	14.6	13.8	13.6	13.9	18.5	22.2	37.1	90.1	44.3	13.1
MAX	16	16	16	14	15	15	92	44	91	378	96	14
MIN	15	15	13	13	13	13	14	14	14	18	13	13
AC-FT	926	895	897	847	756	853	1,100	1,370	2,210	5,540	2,720	780

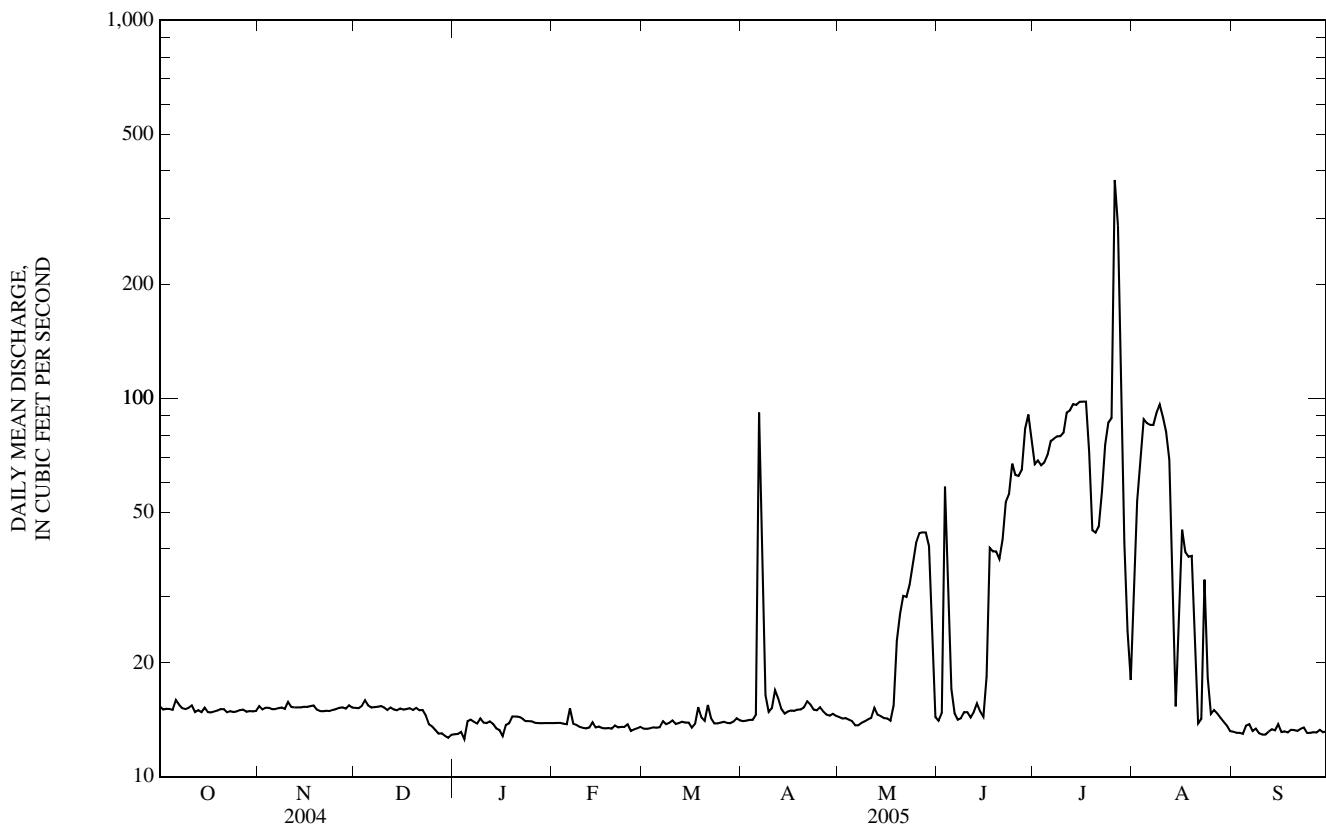
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2005, BY WATER YEAR (WY)

MEAN	161	175	180	146	165	218	211	271	340	330	288	194
(WY)	(1994)	(1994)	(1994)	(1994)	(1994)	(1994)	(1993)	(1993)	(1987)	(1995)	(1993)	(1993)
MAX	3,047	2,983	2,315	2,220	1,472	1,680	1,635	1,939	2,092	2,096	3,083	3,148
(WY)	(1970)	(1972)	(1969)	(1976)	(1978)	(1971)	(1971)	(1971)	(1970)	(1981)	(1969)	(2005)
MIN	11.3	7.70	1.10	8.00	11.7	8.98	9.60	15.0	16.5	28.0	26.1	13.1
(WY)	(1970)	(1972)	(1969)	(1976)	(1978)	(1971)	(1971)	(1971)	(1970)	(1981)	(1969)	(2005)

KANSAS RIVER BASIN

06875900 SOLOMON RIVER NEAR GLEN ELDER, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1965 - 2005
ANNUAL MEAN	28.0	26.1	224
HIGHEST ANNUAL MEAN			1,369
LOWEST ANNUAL MEAN			18.4
HIGHEST DAILY MEAN	253	Jul 9	7,210
LOWEST DAILY MEAN	1.4	Apr 21	0.32
ANNUAL SEVEN-DAY MINIMUM	10	Apr 15	0.62
MAXIMUM PEAK FLOW		720	9,410
MAXIMUM PEAK STAGE		11.68	29.57
INSTANTANEOUS LOW FLOW		9.2	0.32
ANNUAL RUNOFF (AC-FT)	20,310	18,890	162,000
10 PERCENT EXCEEDS	60	67	535
50 PERCENT EXCEEDS	16	15	50
90 PERCENT EXCEEDS	14	13	14



KANSAS RIVER BASIN

133

06876070 SOLOMON RIVER NEAR SIMPSON, KS

LOCATION.--Lat 39°22'06", long 97°55'45", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.7, T.8 S., R.5 W., Cloud County, Hydrologic Unit 10260015, on right bank at downstream side of county highway bridge, 1.0 mi south of Simpson, and at mile 115.4.

DRAINAGE AREA.--5,538 mi².

PERIOD OF RECORD.--October 1990 to September 2005 (discontinued).

REVISED RECORDS.--WDR KS-92-1: 1991.

GAGE.--Water-stage recorder. Datum of gage is 1,334.26 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow mostly regulated since 1967 by Waconda Lake (station 06874200), 57.0 mi upstream. Many small diversions upstream from station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1951 reached a gage height of 42.2 ft, from floodmark on house on left downstream side of bridge, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	17	24	26	24	23	28	45	55	36	21	
2	21	16	24	23	24	23	27	32	50	28	21	
3	21	22	23	23	23	22	27	32	33	20	20	
4	21	23	24	18	22	25	22	27	123	34	21	20
5	22	23	24	11	23	25	23	27	178	27	23	18
6	23	23	25	19	27	24	171	27	71	27	36	17
7	26	23	25	21	36	24	1,650	27	36	20	32	18
8	28	24	25	21	31	25	548	27	27	20	34	20
9	25	24	24	23	19	24	133	27	24	23	34	23
10	22	24	24	22	25	24	73	27	22	19	33	19
11	23	25	24	21	23	24	162	26	24	19	39	18
12	23	25	24	22	32	23	101	27	26	24	51	18
13	22	24	24	22	31	23	71	28	26	29	52	18
14	22	23	21	19	43	23	53	28	24	23	55	16
15	22	22	22	17	42	23	42	28	24	26	43	19
16	22	22	23	e17	31	23	38	25	22	26	28	19
17	22	24	23	17	26	23	35	25	23	30	23	19
18	22	25	26	19	25	23	33	25	25	41	36	19
19	23	25	23	19	24	23	32	25	30	77	38	18
20	21	25	19	22	24	23	31	23	35	66	43	17
21	22	24	25	25	24	29	65	25	29	36	45	16
22	23	24	13	26	24	38	58	29	26	25	43	16
23	24	24	e16	21	24	37	37	33	22	17	31	16
24	24	24	17	22	24	31	30	33	31	12	27	17
25	24	23	18	23	24	28	30	34	37	18	29	19
26	24	24	22	23	24	25	32	34	44	80	40	19
27	24	26	24	25	24	25	30	37	35	1,130	35	17
28	24	26	25	23	24	25	29	42	26	826	42	17
29	27	26	24	23	---	24	28	43	24	341	34	18
30	26	25	28	24	---	24	28	52	42	125	25	19
31	40	---	24	24	---	23	---	56	---	59	23	---
MEAN	23.7	23.5	22.8	21.3	26.7	25.3	122	30.6	38.8	108	34.8	18.4
MAX	40	26	28	26	43	38	1,650	56	178	1,130	55	23
MIN	21	16	13	11	19	23	22	23	22	12	20	16
AC-FT	1,460	1,400	1,400	1,310	1,480	1,550	7,250	1,880	2,310	6,620	2,140	1,090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2005, BY WATER YEAR (WY)

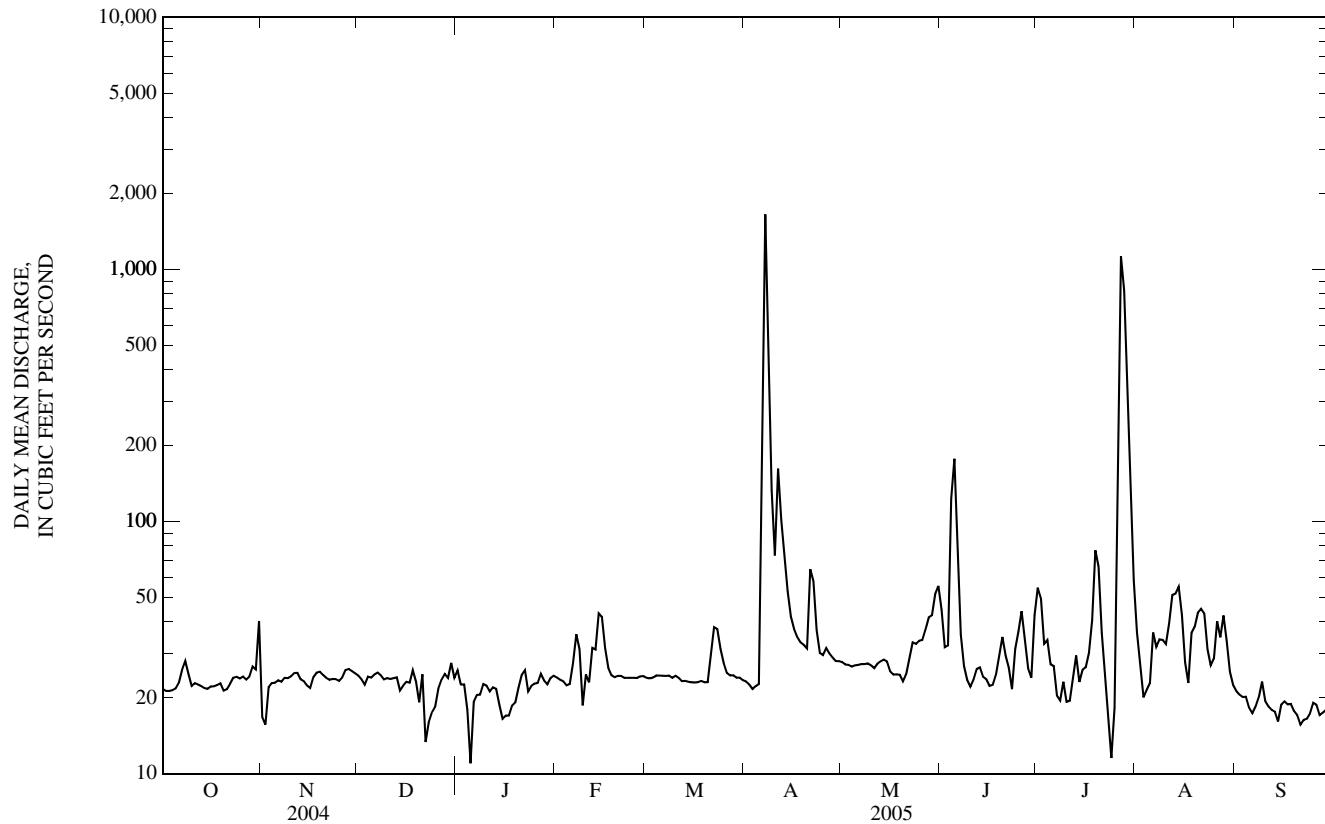
MEAN	270	316	372	315	319	376	320	400	496	705	539	369
(WY)	(1994)	(2005)	(1994)	(1994)	(1994)	(1994)	(1994)	(1993)	(1993)	(1995)	(1993)	(1993)
MAX	3,108	3,055	2,519	2,374	1,574	1,924	1,820	1,395	2,133	5,033	3,671	3,368
(WY)	(1992)	(2005)	(2005)	(2005)	(1992)	(1992)	(1992)	(2004)	(1992)	(1991)	(2000)	(2005)
MIN	23.0	23.5	22.8	21.3	22.2	22.7	22.9	19.1	32.2	32.8	27.8	18.4
(WY)	(1992)	(2005)	(2005)	(2005)	(1992)	(1992)	(1992)	(2004)	(1992)	(1991)	(2000)	(2005)

KANSAS RIVER BASIN

06876070 SOLOMON RIVER NEAR SIMPSON, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1991 - 2005
ANNUAL MEAN	60.5	41.3	401
HIGHEST ANNUAL MEAN			1,694
LOWEST ANNUAL MEAN			41.3
HIGHEST DAILY MEAN	2,240	Jul 9	10,200
LOWEST DAILY MEAN	13	Dec 22	2.1
ANNUAL SEVEN-DAY MINIMUM	19	Dec 20	5.4
MAXIMUM PEAK FLOW		1,920	14,700
MAXIMUM PEAK STAGE		14.80	33.64
INSTANTANEOUS LOW FLOW		3.7	0.78
ANNUAL RUNOFF (AC-FT)	43,890	29,900	290,300
10 PERCENT EXCEEDS	62	43	1,060
50 PERCENT EXCEEDS	26	24	80
90 PERCENT EXCEEDS	22	19	23

e Estimated



06876700 SALT CREEK NEAR ADA, KS

LOCATION.--Lat 39°08'21", long 97°50'12", in NW 1/4 NW 1/4 SW 1/4 sec.36, T.10 S., R.5 W., Ottawa County, Hydrologic Unit 10260015, on left bank at downstream side of county highway bridge, 3.0 mi southeast of Ada, and at mile 19.4.

DRAINAGE AREA.--384 mi², approximately.

PERIOD OF RECORD.--June 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,247.18 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1942 reached a stage of about 21 ft, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 580 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Jun 5	2200	*1,010	*15.78					No other peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	4.3	4.1	4.0	5.2	4.9	6.3	14	10	19	13	e26
2	1.1	4.4	e3.8	4.1	5.1	4.8	5.9	14	18	21	8.4	e18
3	1.2	4.3	e3.5	3.8	5.1	4.6	5.7	14	423	12	6.3	e14
4	1.1	3.8	3.8	4.0	5.2	4.7	5.6	13	967	9.1	4.9	e11
5	0.96	3.6	3.7	e4.0	5.0	4.6	5.8	13	991	7.7	4.0	e9.2
6	0.93	3.8	3.8	e4.0	6.8	4.5	270	12	944	7.0	3.6	e7.7
7	1.3	3.8	3.9	e4.0	8.6	4.5	391	11	646	7.3	3.2	e6.5
8	1.1	3.9	3.8	e4.0	e8.5	4.3	332	11	338	6.8	3.0	e11
9	1.3	3.9	3.9	e4.0	18	4.5	231	11	216	6.2	2.9	59
10	1.4	4.0	3.6	e4.0	14	4.5	159	11	141	5.8	2.7	32
11	2.0	3.9	3.4	e4.0	8.3	4.2	124	9.7	108	5.5	2.5	22
12	2.0	3.8	3.3	e4.0	9.3	4.2	127	9.4	197	5.7	3.8	15
13	1.9	4.1	3.1	e4.0	23	4.2	111	8.8	216	5.7	4.2	11
14	2.0	3.9	e2.8	e4.0	20	4.0	85	9.9	192	5.9	4.0	8.2
15	1.9	3.9	3.3	e4.0	15	3.9	67	11	125	e4.5	4.8	7.1
16	1.9	4.0	3.2	e4.0	13	4.0	53	10	95	e4.1	5.4	6.2
17	1.9	3.8	e3.0	4.1	8.4	4.0	45	9.6	80	e4.1	5.2	5.5
18	2.3	3.8	3.3	4.2	6.7	4.0	39	8.7	76	e4.6	4.3	4.7
19	2.6	3.8	3.1	4.6	6.1	3.9	35	7.4	66	e5.0	3.5	4.6
20	2.8	3.8	e2.9	5.2	5.9	3.8	31	6.8	47	e7.5	3.4	4.0
21	3.2	3.8	e3.2	6.5	5.5	11	29	6.2	35	20	3.3	3.7
22	3.2	3.8	e3.3	8.0	5.4	21	26	5.8	29	13	5.2	3.5
23	3.1	3.8	e3.3	7.4	5.2	18	28	5.5	23	8.5	8.0	3.2
24	3.0	3.6	e3.3	9.5	5.1	23	26	4.9	19	5.9	68	2.8
25	3.1	3.5	3.4	9.1	5.0	17	21	4.8	16	4.7	240	2.5
26	3.6	3.5	3.3	7.8	4.7	14	18	4.5	13	5.3	209	2.3
27	3.9	3.5	3.3	7.0	4.8	11	18	4.0	11	5.2	153	2.6
28	4.3	3.7	3.4	6.6	5.3	9.4	18	4.2	11	43	138	2.7
29	4.0	3.7	3.6	6.4	---	8.0	17	4.1	11	95	108	2.6
30	3.8	3.7	3.9	6.1	---	7.1	16	4.5	19	52	68	2.7
31	4.3	---	3.9	5.6	---	6.6	---	5.8	---	22	e40	---
MEAN	2.34	3.84	3.46	5.23	8.51	7.49	78.2	8.70	203	13.8	36.6	10.4
MAX	4.3	4.4	4.1	9.5	23	23	391	14	991	95	240	59
MIN	0.93	3.5	2.8	3.8	4.7	3.8	5.6	4.0	10	4.1	2.5	2.3
AC-FT	144	228	213	321	472	461	4,650	535	12,070	851	2,250	617

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2005, BY WATER YEAR (WY)

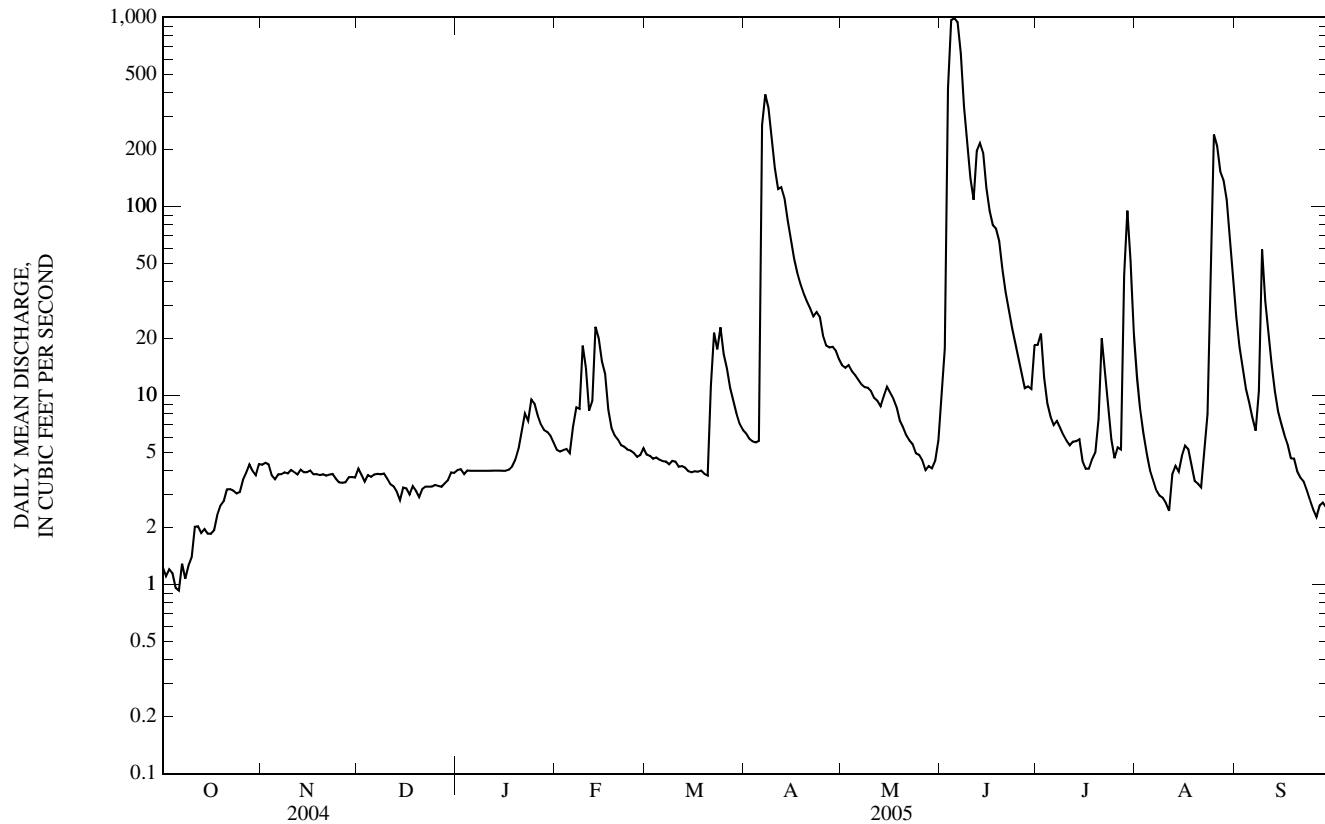
MEAN	38.7	26.1	19.8	23.2	42.2	98.4	97.0	133	96.6	131	33.5	45.4
(WY)	(1974)	(1999)	(1974)	(1974)	(1974)	(1993)	(1973)	(1987)	(1987)	(1995)	(1993)	(1993)
MIN	0.01	0.13	0.39	1.14	1.71	1.25	3.61	1.62	0.48	0.20	0.05	0.43
(WY)	(1967)	(1967)	(1967)	(1967)	(1967)	(1967)	(1967)	(1992)	(1967)	(1966)	(1970)	(1991)

KANSAS RIVER BASIN

06876700 SALT CREEK NEAR ADA, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1960 - 2005
ANNUAL MEAN	25.8	31.5	65.6
HIGHEST ANNUAL MEAN			469
LOWEST ANNUAL MEAN			3.81
HIGHEST DAILY MEAN	876	Jul 11	10,400
LOWEST DAILY MEAN	0.72	Sep 14	0.00
ANNUAL SEVEN-DAY MINIMUM	0.81	Sep 12	16,000
MAXIMUM PEAK FLOW		1,010	16,000
MAXIMUM PEAK STAGE		15.78	23.25
INSTANTANEOUS LOW FLOW		0.75	0.00
ANNUAL RUNOFF (AC-FT)	18,730	22,810	47,540
10 PERCENT EXCEEDS	40	55	97
50 PERCENT EXCEEDS	5.1	5.2	11
90 PERCENT EXCEEDS	1.5	3.1	1.5

e Estimated



KANSAS RIVER BASIN

137

06876900 SOLOMON RIVER AT NILES, KS

LOCATION.--Lat 38°58'09", long 97°28'37", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.31, T.12 S., R.1 W., Ottawa County, Hydrologic Unit 10260015, on right bank at downstream side of county highway bridge, 0.8 mi west of Niles, and at mile 21.6.

DRAINAGE AREA.--6,770 mi², approximately.

PERIOD OF RECORD.--May 1897 to November 1903, October 1917 to current year. Published as "near Bennington" October 1917 to May 1919. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 806: Drainage area. WSP 926: 1935. WSP 1310: 1897-1903. WSP 1440: 1903, 1919, 1927.

GAGE.--Water-stage recorders. Datum of gage is 1,160.97 ft above NGVD of 1929. Prior to Nov. 30, 1903, nonrecording gage at present site and at different datum. Oct. 1, 1917, to May 31, 1919, nonrecording gage near Bennington, 27 mi upstream at different datum. June 1, 1919, to Sept. 30, 1922, nonrecording gage at present site at datum 2.00 ft higher. Oct. 1, 1922, to Apr. 25, 1934, nonrecording gage at present site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow moderately regulated since 1967 by Waconda Lake (station 06874200), 150.8 mi upstream. Slight regulation since 1955 by Kirwin Reservoir (station 06871700) and since 1956 by Webster Reservoir (station 06873100). Many small diversions upstream from station for irrigation. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	46	55	56	63	69	73	91	87	77	303	99
2	46	46	53	56	59	67	72	87	91	71	187	81
3	44	48	53	60	55	66	69	85	299	72	122	68
4	44	51	53	57	54	66	66	84	1,680	94	91	58
5	43	52	54	39	54	66	65	82	1,680	94	75	53
6	45	47	56	59	e60	64	125	81	1,200	82	61	49
7	48	44	57	e55	e60	64	1,010	80	1,090	69	55	47
8	49	45	57	e55	e60	67	2,070	79	884	64	51	48
9	48	46	56	e56	e60	65	1,800	77	523	61	49	46
10	48	48	55	e53	e55	63	1,120	77	326	57	54	43
11	50	50	55	e53	e55	65	632	76	302	54	54	59
12	50	54	54	e55	e55	65	445	77	703	51	59	59
13	49	52	53	e55	189	63	329	87	1,210	52	109	54
14	46	51	53	e55	342	64	341	86	1,140	50	268	50
15	45	51	54	e56	270	61	286	78	563	47	237	47
16	46	52	51	e55	169	61	229	75	317	48	134	45
17	45	54	48	e53	118	61	189	75	214	51	104	43
18	45	54	48	e55	104	61	163	76	168	53	90	42
19	45	54	49	e55	98	61	145	74	141	55	74	41
20	45	53	56	55	87	61	132	71	129	55	61	41
21	45	52	53	60	80	72	124	68	120	55	54	40
22	46	53	50	77	75	233	112	66	732	62	77	39
23	46	52	49	75	72	291	110	64	211	85	173	39
24	45	54	55	67	70	214	112	64	128	80	105	40
25	45	56	56	75	69	162	134	62	105	62	87	38
26	48	52	54	72	68	138	123	62	89	55	235	36
27	48	52	52	73	67	113	107	63	76	49	286	36
28	49	53	53	68	68	97	97	65	78	46	201	35
29	49	54	54	64	---	86	93	65	87	82	153	36
30	46	54	57	64	---	79	94	65	83	600	135	36
31	46	---	52	63	---	76	---	71	---	512	116	---
MEAN	46.6	51.0	53.4	59.7	94.1	91.6	349	74.6	482	95.0	125	48.3
MAX	51	56	57	77	342	291	2,070	91	1,680	600	303	99
MIN	43	44	48	39	54	61	65	62	76	46	49	35
AC-FT	2,870	3,030	3,280	3,670	5,230	5,640	20,760	4,590	28,670	5,840	7,660	2,870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 2005, BY WATER YEAR (WY)

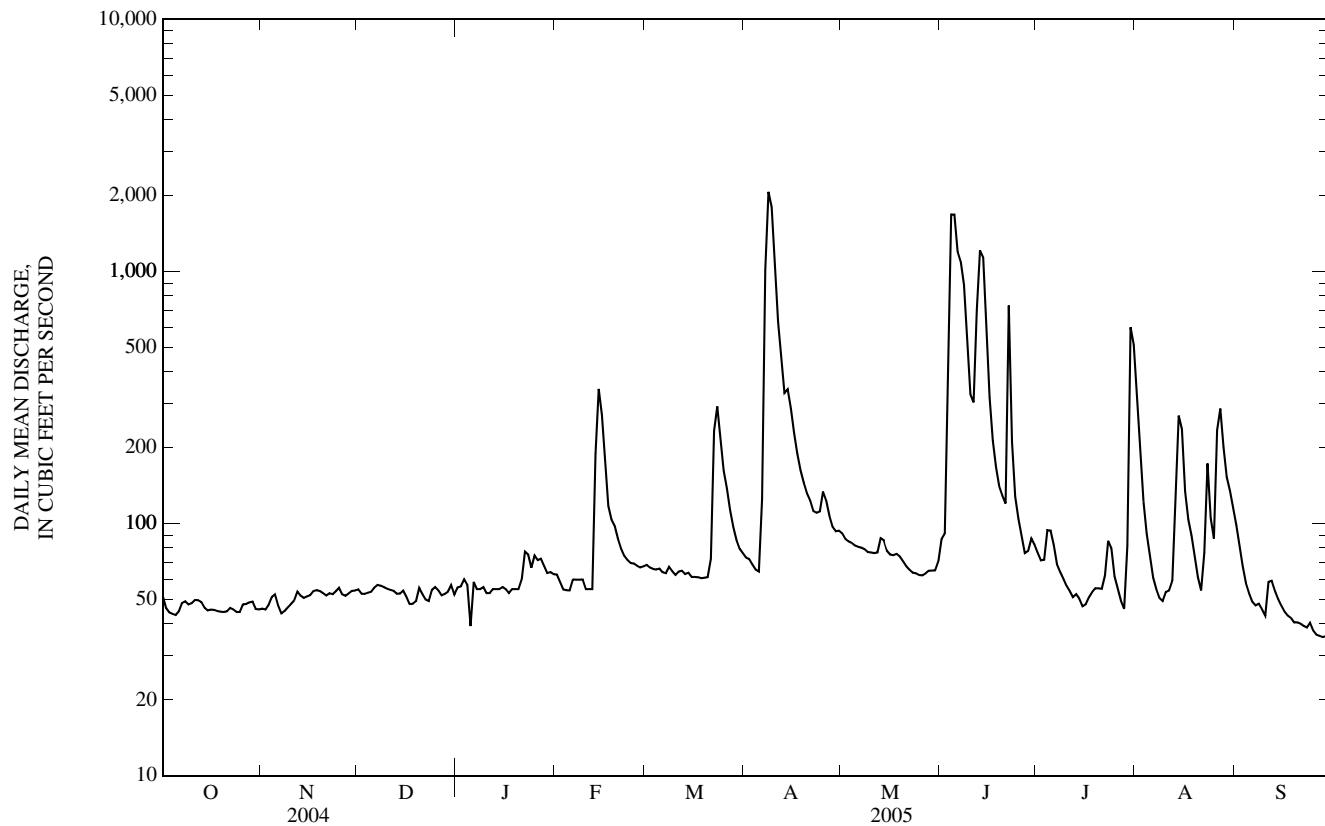
MEAN	387	256	208	198	287	411	518	801	1,306	1,090	593	628
(WY)	(1974)	(1994)	(1994)	(1994)	(1993)	(1993)	(1987)	(1903)	(1951)	(1951)	(1950)	(1946)
MAX	6,545	3,336	2,844	2,595	2,129	2,693	3,393	5,549	12,150	23,080	4,699	5,066
(WY)	(1923)	(1957)	(1957)	(1940)	(1957)	(1957)	(1940)	(1940)	(1956)	(1933)	(1901)	(1956)
MIN	16.2	22.5	19.0	17.5	26.3	35.9	41.7	32.1	69.7	27.1	17.9	5.60
(WY)	(1923)	(1957)	(1957)	(1940)	(1957)	(1957)	(1940)	(1940)	(1956)	(1933)	(1901)	(1956)

KANSAS RIVER BASIN

06876900 SOLOMON RIVER AT NILES, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1898 - 2005
ANNUAL MEAN	143	130	558
HIGHEST ANNUAL MEAN			4,113
LOWEST ANNUAL MEAN			92.3
HIGHEST DAILY MEAN	3,020	Jul 11	157,000
LOWEST DAILY MEAN	43	Oct 5	1.0
ANNUAL SEVEN-DAY MINIMUM	45	Oct 15	4.2
MAXIMUM PEAK FLOW		2,180	178,000
MAXIMUM PEAK STAGE		13.57	31.76
INSTANTANEOUS LOW FLOW		32	1.0
ANNUAL RUNOFF (AC-FT)	103,600	94,110	403,900
10 PERCENT EXCEEDS	185	220	1,190
50 PERCENT EXCEEDS	66	62	154
90 PERCENT EXCEEDS	49	46	50

e Estimated



KANSAS RIVER BASIN

139

06877600 SMOKY HILL RIVER AT ENTERPRISE, KS

LOCATION.--Lat 38°54'23", long 97°07'03", in NW 1/4 NW 1/4 sec.20, T.13 S., R.3 E., Dickinson County, Hydrologic Unit 10260008, on right bank at downstream side of bridge on State Highway 43 in Enterprise, 18.6 mi upstream from Chapman Creek, and at mile 43.3.

DRAINAGE AREA.--19,260 mi².

PERIOD OF RECORD.--October 1934 to current year.

REVISED RECORDS.--WSP 1390: 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 1,098.25 ft above NGVD of 1929. Nov. 1, 1934, to Jan. 28, 1935, nonrecording gage and Jan. 29, 1935, to May 3, 1959, water-stage recorder at site 0.2 mi downstream at datum 0.40 ft lower. May 4, 1959, to Sept. 30, 1991, datum of gage 5.00 ft higher at same site. July 16, 1998, moved gage to new State Highway 43 bridge about 0.1 mi downstream from previous site at previous datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by six lakes or reservoirs, and by numerous diversions upstream from station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1903 reached stage of about 27 ft, present site and datum, from information by U.S. Army Corps of Engineers, discharge, 90,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	208	151	171	179	217	229	308	335	293	424	677	516
2	186	143	171	180	224	226	282	328	580	399	501	450
3	174	141	171	188	219	223	265	320	5,570	374	365	410
4	168	143	166	184	211	219	255	305	14,500	362	276	372
5	164	143	166	126	202	215	245	296	12,800	367	226	324
6	166	146	179	e126	e200	214	1,040	285	9,050	381	198	284
7	169	148	185	e129	e201	209	2,640	278	5,900	378	173	263
8	164	142	191	e135	e214	198	2,780	269	4,260	349	158	249
9	167	139	190	e140	e254	197	3,540	258	4,320	321	143	233
10	164	144	181	e143	281	202	3,320	255	5,580	303	134	218
11	174	150	173	e146	265	192	2,230	247	2,810	284	129	204
12	170	147	169	e150	269	192	1,600	258	3,700	271	134	194
13	175	153	163	e150	436	191	1,200	867	6,400	263	232	211
14	168	152	158	e146	1,030	189	928	2,600	5,550	249	619	197
15	162	154	156	e146	993	189	850	3,400	3,900	234	665	205
16	161	153	154	e146	717	187	763	1,780	2,500	223	563	203
17	159	155	154	e145	520	184	658	874	1,740	228	361	209
18	158	162	155	e148	416	183	569	611	1,380	219	277	203
19	155	163	153	e149	362	182	500	486	1,140	234	242	193
20	152	163	152	e152	334	181	456	415	988	261	224	186
21	152	161	153	e155	309	229	427	359	865	251	208	179
22	151	158	134	e159	293	835	399	325	880	224	195	171
23	148	156	126	e163	279	2,590	374	288	1,440	205	1,090	166
24	145	161	150	e167	266	2,320	348	276	936	204	2,160	163
25	144	159	170	e172	258	1,220	348	337	726	210	1,060	160
26	163	165	156	e176	271	786	369	309	695	207	2,710	158
27	165	170	151	e194	250	602	376	343	595	186	4,490	151
28	188	170	161	214	238	504	367	426	525	183	2,570	147
29	171	174	160	216	---	432	356	344	474	170	1,230	142
30	172	173	156	225	---	377	339	277	448	156	798	140
31	161	---	166	220	---	346	---	259	---	549	604	---
MEAN	165	155	163	164	347	459	938	581	3,352	280	755	230
MAX	208	174	191	225	1,030	2,590	3,540	3,400	14,500	549	4,490	516
MIN	144	139	126	126	200	181	245	247	293	156	129	140
AC-FT	10,160	9,200	10,000	10,050	19,300	28,250	55,800	35,720	199,400	17,190	46,440	13,690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2005, BY WATER YEAR (WY)

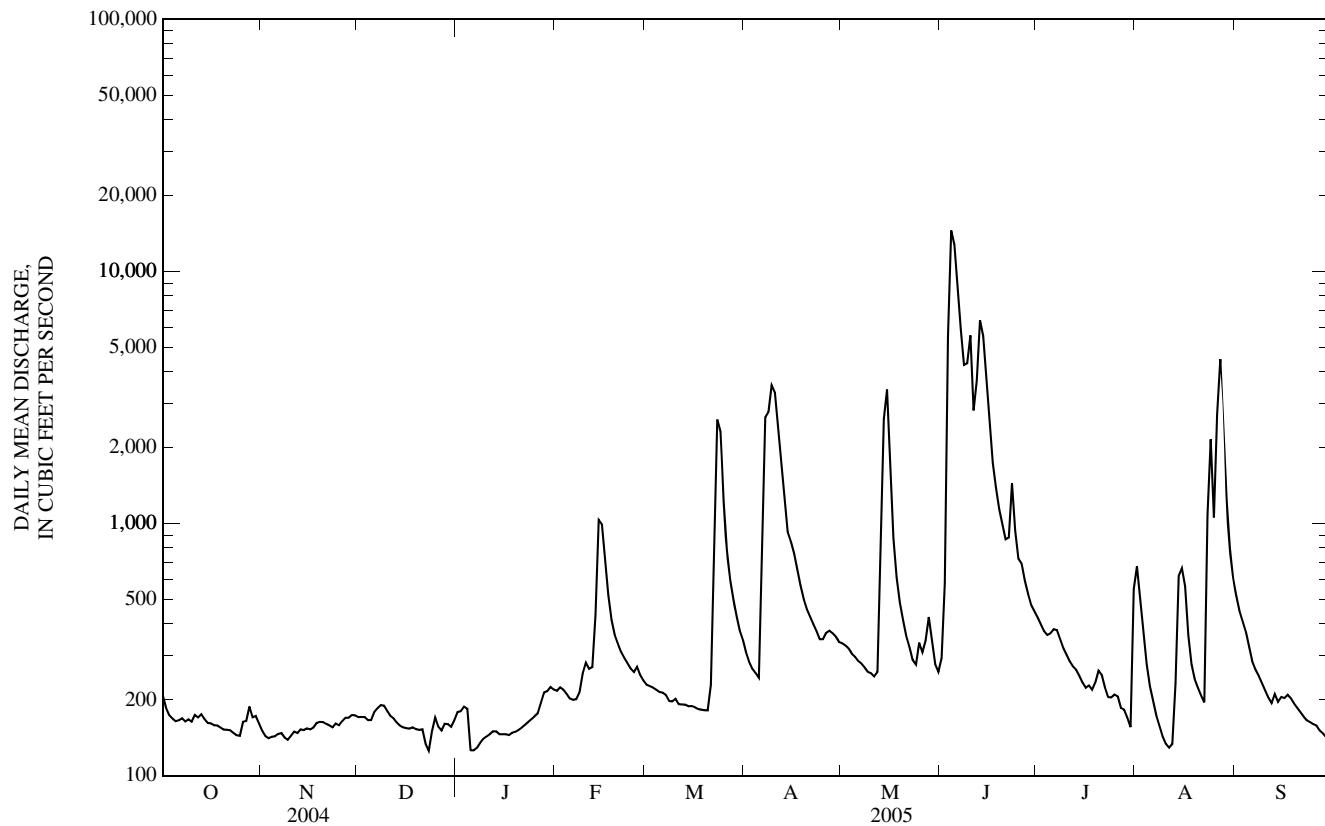
MEAN	1,268	822	637	584	881	1,300	1,717	2,279	3,116	2,942	1,553	1,614
MAX	15,720	6,269	5,723	4,925	5,776	8,584	9,597	11,620	22,500	45,080	11,460	12,130
(WY)	(1974)	(1974)	(1974)	(1994)	(1949)	(1973)	(1973)	(1995)	(1951)	(1951)	(1993)	(1951)
MIN	65.9	96.6	74.2	55.0	89.0	98.1	96.0	102	310	141	115	58.6
(WY)	(1992)	(1940)	(1957)	(1940)	(1957)	(1935)	(1935)	(1956)	(1988)	(1991)	(2003)	(1956)

KANSAS RIVER BASIN

06877600 SMOKY HILL RIVER AT ENTERPRISE, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1935 - 2005
ANNUAL MEAN	456	629	1,562
HIGHEST ANNUAL MEAN			8,855
LOWEST ANNUAL MEAN			293
HIGHEST DAILY MEAN	5,830	Mar 6	207,000
LOWEST DAILY MEAN	120	Jan 6	38
ANNUAL SEVEN-DAY MINIMUM	130	Jan 5	14,500
MAXIMUM PEAK FLOW			135
MAXIMUM PEAK STAGE			24.33
INSTANTANEOUS LOW FLOW			15,200
ANNUAL RUNOFF (AC-FT)	331,100	455,200	233,000
10 PERCENT EXCEEDS	763	1,110	Jul 14, 1951
50 PERCENT EXCEEDS	225	219	Sep 23, 1956
90 PERCENT EXCEEDS	151	150	Sep 20, 1956
			33.96
			Jul 14, 1951
			10
			Apr 23, 1935
			1,131,000
			3,780
			539
			156

e Estimated



KANSAS RIVER BASIN

141

06878000 CHAPMAN CREEK NEAR CHAPMAN, KS

LOCATION.--Lat 39°01'52", long 97°02'24", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.12 S., R.3 E., Dickinson County, Hydrologic Unit 10260008, on right bank at downstream side of bridge on State Highway 18, 5.0 mi northwest of Chapman, and at mile 10.0.

DRAINAGE AREA.--300 mi².

PERIOD OF RECORD.--December 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,102.41 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to May 5, 1959, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1951 reached a stage of 25.5 ft, from floodmarks, discharge, 46,700 ft³/s, from rating curve extended above 12,000 ft³/s on basis of contracted-opening measurement of peak flow.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Apr 7	1500	1,210	13.98		Jun 12	1600	1,830	17.27
	Jun 3	2300	*3,250	*20.18					

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e8.2	e9.5	e11	e15	17	15	19	18	14	12	11	11
2	e10	e9.0	e12	e15	17	15	18	17	21	12	10	11
3	e9.7	e8.6	e11	e15	16	15	17	16	1,280	16	8.9	11
4	e9.4	e8.6	e12	e15	15	15	16	16	1,650	17	6.5	10
5	e8.8	e8.6	e14	e15	16	15	16	16	319	15	5.8	9.6
6	e8.4	e8.4	e14	e15	e17	16	72	16	94	13	8.2	9.6
7	e9.0	e8.6	e14	e14	e17	16	865	16	49	12	7.1	9.5
8	e9.3	e8.4	e14	e15	e17	15	324	16	34	10	6.9	9.7
9	e8.6	e8.4	e13	e15	19	15	93	16	33	12	6.3	9.5
10	e8.3	e10	e12	e15	19	15	59	15	381	11	6.0	9.8
11	e8.2	e11	e12	e15	18	15	59	15	1,460	8.9	8.2	9.9
12	e7.3	e9.9	e11	e15	15	15	133	15	1,280	11	13	9.4
13	e6.7	e9.4	e11	e14	119	14	84	17	1,430	8.8	87	8.4
14	e8.5	e8.3	e11	e13	282	15	54	15	391	7.4	48	7.7
15	e8.8	e8.1	e10	e14	96	15	39	14	125	6.7	34	8.4
16	e8.0	e8.8	e10	e12	42	15	33	14	79	5.4	25	8.5
17	e7.2	e9.1	e11	e12	29	15	30	14	60	5.4	17	8.6
18	e7.5	e9.4	e12	e12	24	15	27	13	49	9.7	14	8.6
19	e7.6	e9.6	e12	e13	21	15	26	12	42	22	13	9.7
20	e7.4	e9.1	e13	e14	20	15	25	11	37	18	14	8.5
21	e7.9	e8.8	e12	e15	20	18	23	11	33	22	13	8.0
22	e8.5	e8.8	e12	e15	19	129	22	10	30	16	12	7.8
23	e8.9	e9.9	e12	e15	18	227	19	8.8	34	13	13	8.6
24	e9.4	e11	e13	22	17	72	18	7.2	30	9.5	13	7.9
25	e10	e11	e13	19	16	45	17	6.9	25	6.2	50	8.5
26	e12	e10	e12	17	16	36	18	8.2	21	8.9	37	8.1
27	e13	e10	e12	16	16	30	19	8.5	19	11	25	7.3
28	e13	e9.5	e13	17	16	26	20	9.0	18	13	16	8.6
29	e12	e9.9	e13	17	---	24	19	9.0	17	16	13	7.8
30	e11	e11	e14	16	---	22	18	9.1	14	14	12	7.7
31	e10	---	e14	16	---	20	---	11	---	12	11	---
MEAN	9.12	9.36	12.3	15.1	34.8	30.6	73.4	12.9	302	12.1	18.2	8.96
MAX	13	11	14	22	282	227	865	18	1,650	22	87	11
MIN	6.7	8.1	10	12	15	14	16	6.9	14	5.4	5.8	7.3
AC-FT	561	557	754	928	1,930	1,880	4,370	795	17,990	744	1,120	533

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2005, BY WATER YEAR (WY)

MEAN	67.0	49.6	33.6	35.3	63.5	113	97.7	172	162	129	63.9	69.1
(WY)	(943)	(659)	(214)	(223)	(263)	(690)	(594)	(1,115)	(963)	(1,479)	(375)	(598)
	(1974)	(1999)	(1974)	(1962)	(1969)	(1973)	(1999)	(1995)	(1977)	(1993)	(1977)	(1973)
MIN	2.64	1.69	3.23	3.60	5.30	4.53	5.60	4.14	7.11	3.61	0.86	3.77
(WY)	(1958)	(1957)	(1957)	(1957)	(1957)	(1957)	(1957)	(1956)	(1956)	(1955)	(1955)	(1957)

KANSAS RIVER BASIN

06878000 CHAPMAN CREEK NEAR CHAPMAN, KS—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1955 - 2005
ANNUAL MEAN	42.3	44.4	88.1
HIGHEST ANNUAL MEAN			326
LOWEST ANNUAL MEAN			11.4
HIGHEST DAILY MEAN	1,990	Jun 28	12,600
LOWEST DAILY MEAN	1.9	Sep 3	0.20
ANNUAL SEVEN-DAY MINIMUM	2.4	Aug 28	0.41
MAXIMUM PEAK FLOW		3,250	15,800
MAXIMUM PEAK STAGE		20.18	24.08
INSTANTANEOUS LOW FLOW		4.4	0.10
ANNUAL RUNOFF (AC-FT)	30,700	32,160	63,830
10 PERCENT EXCEEDS	36	38	116
50 PERCENT EXCEEDS	10	14	23
90 PERCENT EXCEEDS	6.4	8.3	7.4

e Estimated

